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**Final Environmental Impact Report**

***AGOURA HILLS  
GENERAL PLAN***

State Clearinghouse #84080115

June 12, 1985

City of Agoura Hills  
30101 Agoura Road, Suite 102  
Agoura Hills, CA 91301


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FINAL ENVIRONMENTAL IMPACT REPORT

for

AGOURA HILLS GENERAL PLAN

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## INTRODUCTION TO THE FINAL ENVIRONMENTAL IMPACT REPORT

This Final Environmental Impact Report was prepared in accordance with the Guidelines for Implementation of the California Environmental Quality Act published by the Resources Agency of California (California Administrative Code Sections 15000 et. seq).

The final EIR consists of the following items:

This addendum, including the following:

Revised title page

Revised Table of Contents

Replacement text pages

A list of page-by-page amendments to the Draft EIR.

A new EIR section including a summary of comments on the Draft EIR and responses to those comments.

The Draft EIR

An appendix including copies of all written correspondence received on the Draft EIR.

In addition, the Draft and Final EIR incorporate the General Plan by reference. Where tables and figures in the Draft EIR relating to the proposed land use plan conflict with information in the adopted Land Use Element and Housing Element of the adopted General Plan, information in the General Plan supersedes these tables and figures.



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ADDITIONS, DELETIONS AND MODIFICATIONS TO THE DRAFT EIR FOR INCORPORATION IN THE FINAL EIR.

The following additions, deletions and modifications are made to the Draft EIR for incorporation in the final EIR.

page i. Insert new paragraph at bottom of page as follows:

"Increased water pollution and runoff within the City and the study area."

page iii. Modify item 5 to read:

"5. Mitigation for loss of archaeological resources. The potential for loss of archaeological resources will be mitigated by appropriate surveys and observation before and during development, and preservation of sites in place where possible. Where preservation in place is not possible, alternate means of preserving the value of the archaeological resource are identified.

page iii. Paragraph 8, change "provision for transit" to "provision for transit and transportation management".

page iii. Add paragraph numbered 9. as follows:

9. Measures to reduce impacts of runoff including provision of adequate flood control channels and desilting basins.

page 23, 24, 25, 29, 30, 31: Replacement pages provided.

page 2. Modify paragraph with heading "Plan Goals and Objectives" to read:

"The goals and objectives of the land use element, found on page 1.6 of the General Plan, summarize the overall objectives of the proposed project."

page 2. Delete specific goals and objectives at bottom of page.

page 5. Paragraph with heading "Proposed Uses" is amended to read:

"Principal land uses proposed for the Agoura Hills study area include (1) residential; (2) commercial (including shopping center); (3) tourism and (4) business park."

page 7. Third paragraph, modify last sentence to read:

"Residential development is primarily concentrated north of the freeway."

page 9. Last paragraph. Modify next to last sentence to read:

"Another potential loss of habitat is destruction of oak woodland areas and oak savannah which while suitable for development, also contain oak trees which are hundreds of years old."





page 11. Add under noise mitigation measures: "Freeway noise barriers".

page 11. Add under "risk of upset"; "Roof ordinance, site design".

page 32. Add at end of paragraph 2, "local transit".

page 33. Modify second sentence to read:

"Private septic systems are also used in Old Agoura and other parts of the study area, and will probably continue to be used due to environmental and cost constraints of an expanded public sewage system."

page 33. Modify second paragraph to read as follows:

Surface and ground water quality in the Santa Monica Mountains is affected by the quality of treated effluent released by sewer treatment facilities, storm runoff, and pollutants released by septic systems and livestock areas. Surface and ground water are not used for domestic water supply in the study area."

page 35. Third paragraph, modify last sentence to read:

"The extent of surface and ground water pollution problems as a result of septic system failure is not known because a comprehensive study of septic tank pollution has not been completed for the study area."

page 35. Modify last paragraph to read:

"The Tapia Water Reclamation Facility currently has a capacity of 8 million gallons per day (MGD) The Las Virgenes Municipal Water District has plans to expand the capacity of the plant to 10.0 million gallons per day. Reclaimed water is used for irrigation of agricultural areas and landscaping throughout the freeway corridor, with water which cannot be sold for irrigation released into Malibu Creek."

page 39. Paragraph 4. Modify third sentence to read:

"Currently, the supply of naturally occurring oak trees is decreasing for two reasons."

page 67. Add interior noise level at the bottom of Table 14 as follows:

Residential Interior	45	45
----------------------	----	----

page 87. Change "Chesebro Road" to "Palo Comado Canyon Road."

page 89. Third paragraph:

Change "Chesebro Road" to Palo Camado Canyon Road."



page 91. Last paragraph, modify second sentence to read:

"Principal improvements include freeway ramp improvements at Reyes Adobe Road, Kanan Road and Palo Comado Canyon Road, extension of Canwood Street to Driver Avenue, widening and realignment of Agoura Road and improvement of Driver Avenue."

page 93. Add at end of mitigation measure #2:

"Driver would remain a two-lane arterial along its current development length with minimum right-of-way acquisition for widening, straightening and intersection modifications."

page 93. Mitigation measure #3:

Change "Chesebro Road" to "Palo Comado Canyon Road."

page 93. Mitigation measure #4:

Change "Chesebro Road" to "Palo Comado Canyon Road."

page 93. Add at end of mitigation measure #4:

"The General Plan identifies alternative alignments for freeway ramp improvements at Kanan Road and Reyes Adobe Road that correct ramp deficiencies and improve functioning of frontage roads."

page 93. Add mitigation measure #7:

7. Work with Ventura County, the City of Thousand Oaks and the City of Westlake Village to provide alternate arterial access to Oak Park to additional development.

page 93. Add mitigation measure #8:

8. Extension of Canwood Street from Derry to Chesebro Road.

page 101. Modify last sentence of second paragraph to read:

"The landfill site occupies 416 acres, of which 260 acres is actively used in landfill operations at the present time."

page 101. Modify fourth paragraph to read:

"The Calabasas Landfill currently receives approximately 2000 tons per day. In approximately five years the current fill area will reach capacity. The current unused capacity is 15.9 million tons for approximately 27 years. The Districts plan to move its landfill operations to an adjacent canyon. The new area is also covered by the original conditional use permit. The expansion, based on current yearly tonnages, would provide for approximately twenty-two (22) years of additional capacity."





page 104. Amend first sentence to read:

"Based on the school district's projections, the district qualifies as an overcrowded district, which makes it eligible to take advantage of County Ordinance No. 11810 (State Law - SB 201)."

page 105. Modify the last sentence to read:

"Table 23 summarizes estimated sewer flow from the City and Study Area at development capacity under the General Plan, based on per unit sewer generation factors from the City of Los Angeles EIR Manual for Private Development Projects."

page 107. Modify the last sentence to read:

"Table 24 below illustrates projected water demand for the City and the Study Area based on water usage factors of the City of Los Angeles EIR Manual for Private Development Projects."

page 125. Add at the end of the first paragraph:

"with pastoral vistas of scenic rolling hills."

page 125. Add paragraph 4 under Environmental Impact as follows:

Development has the potential to obstruct views and vistas that now exist where land is vacant through the modification of topography by grading, and through the construction of structures and development of landscaping. Views and vistas of rolling hills, undeveloped ridgelines, prominent physiographic features, wooded hillsides and prominent oak trees are important aspects of the rural character of the community and their preservation is central to the entire General Plan. The Community Design Element includes an extensive discussion of the nature of this potential impact, and includes mitigation measures to deal with this impact at the project level.

page 125. Modify second sentence under Mitigation Measures to read as follows:

"A level of impact acceptable to the public is considered to be achieved by compliance with the City Hillside Development Standards, grading ordinance and design review of development projects in accordance with General Plan goals and objectives and other development regulations."

page 125. Modify last paragraph to read:

"A number of specific mitigation measures are incorporated in the General Plan, Hillside Ordinance and other development regulations. These measures include the following:"



page 126. Modify mitigation measure 1 to read:

"Prior to approval of tentative subdivision maps, information must be provided including accurate proposed grading, documentation of project visual impacts through photographs, sketches, renderings, models, computer illustrations or other documentation as appropriate to the project, indicating response to objectives of ridgeline preservation, minimization of cut and fill areas, modification of existing terrain, and preservation of scenic views."

Modify mitigation measure number 3 to read:

"Grading shall be minimized and shall respond to the natural terrain to the maximum extent feasible for the proposed project. The intent of minimizing grading is to reduce impact on vegetation, particularly oak trees, to preserve the natural appearance of rolling terrain, and to minimize the extent of large artificial cut and fill areas."

page 126. Modify mitigation measure 6 to read as follows:

"6. Ridgelines and prominent physiographic features will remain undeveloped. Design guidelines will be developed for development at the foot of Ladyface Mountain to insure preservation of key scenic views and vistas in the scenic corridor along Route 101."

page 126. Modify mitigation measure 8 to read as follows:

"8. Flood control plans submitted by developers shall include as an alternative, wherever open concrete channels are proposed, a natural or seminatural channel, for City review of technical and economic feasibility. A natural or seminatural channel is a channel that provides for adequate storm flows but is constructed to provide the appearance of a natural stream channel through appropriate engineering design."

page 129. Correct street name spellings in location of Medea Creek Park as follows:

"Shady Creek Drive between Laro Drive and Embler Court."

page 129. Table 35, delete references to parks outside the study area including all parks following "sumac".

page 130. Delete this page.

page 133. Modify last sentence of third paragraph to read:

"Excavation of this site uncovered 418 Chumash Indian skeletons, some of which dated back 800 years."





page 134. Modify the second paragraph to read:

"The major historic site in the City of Agoura Hills is the Reyes Adobe, located on a knoll several hundred feet north of the Ventura Freeway on Reyes Adobe Road and surrounded by new subdivisions. The site of the adobe was originally part of a 17,760 acre land grant that extended from Liberty Canyon on the east to the edge of Westlake Village on the west. The grant was originally given to Miguel Ortega under the direction of King Philip of Spain and was called El Rancho de Nuestra Senora Riena de Las Virgenes. Later, under the U.S. Flag, ownership of the land grant was filed by Dona Maria Antonia Machado del Reyes. Her heirs, Jose Reyes and Maria Altgracia Reyes de Vejar are reported to have built the adobe in the early 19th century."

page 134, 3rd paragraph is amended to read as follows:

"The adobe is an important historic resource to the local community for a number of reasons. It represents the architecture of the state's and the community's history. It is a focal point for artifacts that are a link to past ways of life, and a point of reference culturally for citizens of Hispanic and Mexican heritage."

page 134, 4th paragraph is amended to read as follows:

"The Las Virgenes Historical Society has held several annual restoration fund-raising activities. An architect's report was completed in December 1983 detailing the problems with the structure as a first step in restoration efforts. The Historical Society is currently attempting to have the Adobe placed on the National Register of Historic Places, but may not be able to because of modification to the structure's architectural integrity over the years. Ultimately, the Society wants to make the adobe a museum."

page 135, paragraph 2 is amended to read:

"Development in Agoura Hills will have direct and indirect impact on archaeological resources and historic structures and remains. Grading, trenching and other ground-disturbing activities may disturb these sites in a direct way. Increasing population density resulting from development may bring about indirect impacts by exposing sites to vandalism and unauthorized digging by relic collectors. These sites are a valuable source of scientific data, cultural information about Native American societies and a source of public enjoyment and education. These sites may also be of spiritual significance to Native Americans."

page 135, paragraph 3 is amended to read:

"Sites that have already been identified may also be accidentally destroyed or intentionally excavated during development. In general, saving of sites intact in place is the most desirable development mitigation measure. Where such sites cannot be saved,





they may be excavated and properly documented. However, such excavation may not yield as much information about the site as could be obtained through later excavation at a more leisurely pace using techniques that may be available in the future."

"The City should maintain files where results of archeological and historical studies about the area may be referred to for planning purposes. These files will supplement information available in regional archaeological resource centers."

page 135. Cultural resources mitigation measures are reordered to place the priority on preservation of sites in place rather than excavation prior to development. Excavation is the recommended mitigation measure when preservation is not feasible.

Mitigation measures are modified to read as follows:

"1. Cultural resource surveys should be a part of all development projects. These surveys should be conducted at the earliest possible time by qualified professional archaeologists. Archaeological surveys, testing programs and data recovery excavations should meet generally established standards of technical application in archaeology. Explicit provision should be made for adequate care of artifact collections that result from these studies. Reports of all such investigations should be completed in a timely way, and meet accepted standards of archeological reporting.

"2. Results of all archaeological work should be transmitted to local institutions having archeological expertise in order to invite review and comment by the region's scientific community. Similar comments should be sought from the region's Native American organizations.

"3. Identified archeological sites of significant value, as defined under appropriate state or federal statutes, should be afforded preservation protection to include the following alternatives:

- a. Impact avoidance through project avoidance (move project or some of its features to avoid impact, and protect the site from intrusion);
- b. Impact avoidance through project design or redesign (such as burying the resources under the project in a way that preserves their value and maintains accessibility for possible future excavation);
- c. Recovery of important artifacts or information before destruction of resources;
- d. Project delay or abandonment if above measures are not sufficient to mitigate impacts of the proposed project.



"4. Cultural resource surveys based on surface inspection shall consider the potential for uncovering of valuable sites or artifacts during grading. For sites with such potential, observation by a qualified archaeologist shall be provided during initial grading to provide interpretation of findings and identify the need to stop or modify grading for further investigation.

"5. Specific plans shall review archaeological significance of project areas, and provide for preservation of archaeological and paleontological sites of value. In situations where preservation would eliminate the utility of the site to the private property owner, an environmental impact report shall be prepared reviewing the archaeological and cultural significance of the site, identifying alternatives for retaining the value of the cultural resources, and including appropriate mitigation measures for preservation of cultural resource values."

page 138. Mitigation measure 6 is amended to read as follows:

"6. Loss of Archaeological and Paleontological Sites. Development involves the potential loss of archaeological and paleontological sites. Mitigation measures include preservation in place, preservation through burying for future investigation, and excavation prior to development. In spite of these mitigation measures, some adverse impact on these resources is unavoidable."

page 138. Add impact #11:

"11. Increases in runoff and water pollution from increased coverage by impervious surfaces. Developments are required to install necessary flood control channels and desilting basins."

page 142. Modify mitigation measure 5 to read as follows:

"5. Mitigation of Loss of Archaeological and Paleontological Sites." The potential for loss of archaeological and paleontological sites will be mitigated by burying and protecting sites in development where possible. In cases where such protection is not possible and the City has discretionary approval over the project, developers will be required to provide a cultural resources survey and appropriate archaeological investigation of sites prior to development. In spite of these measures, some potentially informative archaeological or paleontological resources may be lost in the development process. The above measures are considered sufficient to insure that the most valuable sites receive needed attention."

page 143. Add mitigation measure 10:

"10. Measures to reduce the impact of increased storm runoff. Projects are required to install necessary flood control channels and desilting basins."





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## EXECUTIVE SUMMARY

This document summarizes the environmental effects of the proposed City of Agoura Hills General Plan. The proposed plan provides guidelines for land uses in the City and in 12,413 acres of land now outside the City being considered for eventual annexation.

### The Proposed Project

The plan proposes development over the next 20 years of approximately 15,000 additional acres in the City of Agoura Hills and the area proposed for annexation. The population of the City is expected to grow from approximately 16,000 people to approximately 35,000 to 40,000 people over this period through a combination of infill of existing developed areas, development of previously approved subdivisions and new development. A complete system of urban infrastructure serving this new development is proposed.

### Environmental Impacts

This development will have significant impacts on the nature of the environment in the City and its immediate surroundings. Impacts local to the project area include the following:

Modification to terrain through grading to eliminate geologic hazards and to modify slopes to provide for appropriate building sites, roadways and utility rights-of-way.

Modification of wildlife habitat through direct change of existing habitat areas and impacts of intrusions by humans and domestic animals in some natural habitat areas. An urban habitat will replace much of the current grazing land in the project area.

Modification of land use in the project area through new development on land now used for grazing or unused.

Requirement for an infrastructure of public facilities, utilities and services to serve the newly developed area.

Exposure of new inhabitants to risks including seismic hazards, flooding and fire.

Local levels of air pollution will be greater under the proposed project than if the development were not to take place.

Increases in noise levels through additions to traffic on local arterials and the freeway.



Regional impacts of this development will in general be insignificant. Agoura Hills' projected growth represents approximately 2% of the total growth projected for Los Angeles County and less than 1% of the projected growth of the 6-county Southern California Association of Governments (SCAG) region between 1980 and 2000. Thus the City's demands on regional resources including water, sewage disposal, energy, solid waste disposal, the regional transportation system and air quality will be small as a portion of regional demands.

Specific regional impacts of concern include:

Increases in traffic on already congested regional freeway linkages.

Increases in regional air pollution emissions relative to a case in which no development were to take place.

Mitigation  
Measures

A number of mitigation measures are included in the program to reduce the potentially significant impacts of the project. These include:

1. Measures for mitigation of potential adverse aesthetic effects and modification of physical features including identification of key physiographic features for permanent open space use in substantially their current form, adoption of hillside development standards including provisions for minimizing the visual impact of hillside development, and site plan review at various points in the development process including evaluation of aesthetic criteria and preparation of "before" and "after" grading models of major developments.

2. Measures for mitigation of potential adverse effects on natural habitats including identification of key habitat areas for open space preservation or restoration and adoption of oak tree and raptor mitigation measures for future development.

3. Measures for mitigation of traffic impacts including measures to reduce tripmaking and provide high performance on through routes. Measures include development of a "balanced" residential community to minimize the need for trips to employment and reduce trip lengths; provision for alternate modes of transportation to the automobile, including provisions for bicycle and pedestrian transportation systems providing service to key neighborhood service areas; policies to provide for smooth flow of traffic on major arterials to reduce energy consumption and increase capacity and level of service.





4. Measures for mitigation of demands on public facilities including a requirement that all necessary public facilities be available or on an approved schedule of availability at the time development is occupied in order to insure that no undue strain on public facilities or services exist.

The potential for facilities and services to result in fiscal imbalance for the City will be mitigated by continuing to adjust fees, other revenues and municipal costs to insure that developments pay their way over their life cycle.

5. Mitigation of loss of archaeological resources. The potential for loss of archaeological resources will be mitigated by provision for cultural resource surveys as part of each major development, with opportunities provided for appropriate investigations.

6. Measures to minimize adverse impacts on air quality. Measures to minimize adverse impacts on air quality include all mitigation measures to reduce vehicle miles traveled and measures to save energy in buildings. These measures include provision of a "balanced" community providing employment, housing and commercial uses near each other to reduce trip lengths; measures to encourage use of public transportation including providing transit facilities and arrangement of land uses to maximize transit accessibility from high-intensity uses; and measures to save energy in buildings and public activities.

7. Measures to reduce noise conflicts through provision of barriers or sound insulation to provide acceptable interior and exterior noise levels for residential areas.

8. Measures to reduce energy consumption including development of a "balanced" residential community reducing vehicle miles traveled and resulting energy consumption; provision for transit in specific plans and public agency plans for circulation; requirements for energy-efficient subdivision, site planning and building design; requirements for solar access analysis in all large projects.



## INTRODUCTION

This Draft Environmental Impact Report (DEIR) was prepared in accordance with the Guidelines for implementation of the California Environmental Quality Act published by the Resources Agency of California (California Administrative Code sections 15000 et seq).

Following its hearing and adoption, this report will be the official position of the City Council of the City of Agoura Hills, which is the lead agency for this project.

### Availability of Reports

This Draft Environmental Impact Report represents the findings and conclusions of the City Council of the City of Agoura Hills. Copies of this report are available for public inspection and copying at the Agoura Hills City Hall, 30313 Canwood Street, #25, Agoura Hills, California 91301 and at the Agoura Hills City Library. Copies are available to the public on payment of a reasonable charge for reproduction.

### DEIR an Information Document

The DEIR is intended to provide information to public agencies and the general public regarding the probable environmental effects resulting from adoption of the General Plan. Under provisions of the California Environmental Quality Act, "The purpose of an Environmental Impact Report is to identify the significant effects of a project on the environment, to identify alternatives to the project, and to indicate the manner in which such significant effects can be mitigated or avoided." (California Public Resources Code section 21002.1.(a).) Thus the EIR is an information document for use by decisionmakers, public agencies and the general public. It is not a policy document which sets forth City policies regarding any potential development discussed.

### The EIR in the Development Process

The EIR will be used by City agencies in assessing impacts of specific projects as they come before the City during the development process. During the development process, alternatives and mitigation measures identified in the EIR may be applied to specific project by City restrictions on development through conditions on permits, development deviations and other City actions.

At the time each development is proposed, the City will conduct an initial study under the City EIR guidelines to determine whether or not the proposed specific development will have environmental impacts of significance which are not discussed in this EIR. If significant impacts not discussed in the EIR may exist, a project EIR focused on impacts of the specific project will be prepared.



Comments  
Requested

Comments of all agencies and individuals are invited regarding the information contained in the DEIR. Where possible, those responding should endeavor to provide that additional information they feel is lacking in the DEIR, or indicate where that information may be found. Discussion of environmental impacts are also found in the General Plan. Following a period for circulation and review of the DEIR and a public hearing, all comments and responses to them will be incorporated in a Final Environmental Impact Report prior to certification of the document by the City Council.





## 1. DESCRIPTION OF THE PROPOSED PROJECT

### Background

The City of Agoura Hills is located just east of the western Los Angeles County line. It is 20 minutes from the San Fernando Valley and is situated 13 miles from the Pacific Ocean. It is bounded by the cities of Westlake Village and Thousand Oaks to the west, the Santa Monica Mountains National Recreation Area to the south and east as well as portions of Agoura Hills' northern boundary. The community of Oak Park also lies to the north of the City.

Agoura Hills is located within the Malibu/Santa Monica Mountains Area Plan area. On December 29, 1981, the Malibu/Santa Monica Mountains Area Plan was adopted by the Los Angeles County Board of Supervisors as part of the Los Angeles County General Plan. Whereas the County General Plan focuses on issues which are regional in nature, the Area Plan focused on specific land use, circulation, public facility and natural resource issues.

The area covered by the Area Plan includes 104,120 square acres or approximately 163 square miles of unincorporated (at Plan date) land between Ventura County and the City of Los Angeles and includes the City of Agoura Hills. Almost 80 percent of the Malibu/Santa Monica Mountains Plan area is vacant land, mostly between the Malibu Coast and the Ventura Freeway. The area is bounded by Ventura County and the City of Thousand Oaks on the west and north and the cities of Los Angeles and Hidden Hills on the east and northeast, with the Pacific Ocean forming the southern boundary.

The population in the Plan's area has increased dramatically since 1960. Between 1960 and 1970 the population more than doubled from 12,000 to 31,000. The Malibu/Santa Monica Mountains Plan area had grown by another 42 percent by 1975 to approximately 44,000. The 1979 population was 52,000 and the area is continuing to grow.

### General Plan

On December 8, 1982, the City of Agoura Hills was incorporated. The City of Agoura Hills proposes to adopt a general plan to provide a more appropriate framework for the anticipated development of the City over the next 15 to 20 years.

This Environmental Impact Report will be used by the City Council of the City of Agoura Hills and City staff in actions related to adoption of the general plan, revisions of the zoning, subdivision, hillside, grading and noise ordinances. This EIR is not intended to deal in detail with the impacts of further actions in implementation of these actions including approval of



any specific plans for any private development, any specific program implementation or any specific capital projects. It may be used as a reference document providing background information for specific projects, guidelines for impact factors and mitigation measures.

Figure 1 opposite shows Agoura Hills' location in the Southern California region. Figure 2 on the following page is a copy of the land use element map from the proposed general plan. For major undeveloped areas, the General Plan proposes the adoption of specific plans. These specific plans would identify in detail the proposed land uses within any development parcel, the layout of local streets and utilities, public areas including schools, parks and other open space, etc. Each of these specific plans is expected to require independent review of its environmental impacts under the California Environmental Quality Act.

Plan Goals  
and Objectives

The goals and objectives beginning on page 4 below are taken from the land use element of the general plan and summarize the overall objectives of the proposed project:

- |  |  |
|--|--|
| 1.1. Develop a balanced community providing a significant amount of employment and a broad range of housing types while maintaining the high level of environmental quality associated with the Agoura Hills area.   | 1.1.1. Develop employment centers sufficient to provide a number of jobs approximately equal to Agoura Hills' labor force.                                       |
|  | 1.1.2. Maintain a broad range of housing types for all income groups and age categories.   |
|  | 1.1.3. Improve shopping facilities in new centers, existing centers, and commercial strips.  |
| 1.2. Maintain a close relationship between the natural environment and urban areas through an extensive open space network providing a variety of opportunities for experiencing the natural environment within the City and a constant awareness of the City's natural environmental setting. | 1.2.1. Preserve key habitat areas and physiographic features.  |
|  | 1.2.2. Preserve and maintain the natural character and visual quality of the hillsides as a scenic resource, while providing protection from geological hazards. |
|  | 1.2.3. Provide an open space network with pedestrian access where appropriate.   |











# **AGOURA HILLS GENERAL PLAN EIR**

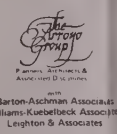
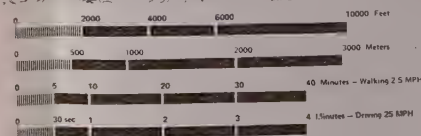


FIGURE 2.  
STUDY AREA



1.3. Maintain a healthy City economy and municipal fiscal balance through a balance of land uses and an appropriate balance of revenues and expenditures, development phasing, and public and private provision of capital improvements, facilities and services.

1.3.1. Insure a stable economic base through provision of a variety of land uses including industrial, office, retail and tourism along with residential uses to insure flexibility of the local economy in response to changing economic conditions.

1.3.2. Phase development and public facilities so that adequate public facilities are available for new developments at the time of occupancy.

1.3.3. Improve areawide coordination of infrastructure development with land development.

1.3.4. Insure that private developments pay their full costs through a system of fees, taxes and restrictions that fully account for capital and operating costs of private development.

1.3.5. If the City finds that public facilities and services will not be available at the time development is occupied, regulate or limit development that may be constructed in years in which the shortfall is expected to occur.

Proposed Uses

Principal land uses proposed for the Agoura Hills study area include: (1) residential; (2) commercial (including shopping center); and (3) business park.

Residential uses are shown to occupy 12,364 acres, or 66% of the total study area,, with densities ranging from .05 to 35 units per acre. A total 16,807 units are anticipated under the proposed General Plan.

Commercial uses, including retail/service uses, mixed commercial/residential uses and shopping center uses account for 435 acres (2% of the total study area).

Business Park and Business Park/Office/Retail uses comprise 3%, or 454 acres, of the study area.

Development Regulations

Concurrent with the General Plan, the City is adopting development regulations to provide for implementation of the plan. Regulations to be adopted include a zoning ordinance, hillside development ordinance, grading ordinance, subdivision ordinance and noise ordinance.







The Zoning Ordinance will provide a more suitable zoning ordinance than the current ordinance for dealing with development under specific plans. The ordinance clarifies procedures for specific plans.

The Hillside Development Ordinance will provide standards for development on hillsides in order to limit visual impact of hillside development and provide for economical use of space through special development provisions applying to hillsides. Part of this ordinance will include grading regulations.

Architectural Review and Site Plan Review Procedures to ensure that the character of Agoura Hills is preserved and to ensure that site plans respond to physical and environmental constraints.

The Sign Ordinance regulates signage in the City to preserve the rural atmosphere and quality of life in Agoura Hills.



## 2. DESCRIPTION OF ENVIRONMENTAL SETTING

Agoura Hills is located near the western extreme of the Los Angeles County urbanized region at the boundary between Los Angeles County and Ventura County. The current City limits include approximately 4,960 acres of land. The study area considered in the General Plan included a potential annexation area with an area of approximately 12,413 acres, for a total planning area of approximately 17,373 acres, approximately 14,251 acres of which is currently vacant.

The City of Agoura Hills is served by one major east-west state highway (U.S. 101), two major east-west arterials (Agoura Road and Thousand Oaks Boulevard) and three north-south arterials (Kanan Road, Chesebro Road and Reyes Adobe Road). The study area is also served by Mulholland Highway and Las Virgenes/Malibu Canyon Road.

Existing commercial development in the City is concentrated along the Ventura Freeway corridor and along Kanan Road. Residential development is concentrated north of the Freeway.

Agoura Hills is located in the South Coast Air Basin. Although Agoura Hills has good air quality because of its location at the fringe of urbanization, vehicle traffic generated by Agoura Hills contributes to the air quality problems of the South Coast Air Basin. National ambient air quality standards for a number of pollutants have not been attained in the South Coast Air Basin, and the potential for attaining these standards by the federally-mandated 1987 deadline is small.

The Southern California region depends on imported water for residential, industrial and agricultural uses. Importing water has high energy and environmental costs which continue as long as water is imported.

The Los Angeles urbanized region is expected to depend increasingly on external sources of electric power from coal and nuclear generating stations. Use of these power sources results in significant risks of various kinds (such as risks of mining accidents or radiation leaks), use of large quantities of cooling water and water for coal transport, pollution of the air, excavation of large areas for recovery of coal and coverage of additional areas by mine waste.

These elements of the economic and environmental system on which development in Southern California depend are important in considering the impact of any development in Southern California. The effect of a given development at nearly any site in the Los Angeles



urbanized region has similar impacts on the more remote elements of the system.

The environmental setting of those factors where potentially significant project impacts are foreseen is discussed in greater detail in the environmental impact discussion following.





### 3. ENVIRONMENTAL IMPACT

This section outlines the environmental setting, environmental impact and mitigation measures for those environmental factors on which the proposed project may have significant effects.

Impacts of the project on the physical environment were found to be potentially significant. Development of approximately 12,000 gross acres of land over the next 10 to 20 years will result in substantial grading for abatement of geologic hazards and provision of adequate building sites, modification of drainage channels, modification of soils and movement of soil. Physical environmental impacts will be mitigated by measures including identification of key physiographic features for permanent open space use, preservation of substantial open space, adoption of hillside development guidelines, and site plan review of grading, development and building plans to ensure that general plan objectives are incorporated in proposals at each stage of processing.

The proposed development will change the appearance of some of the back country areas from grazed or vacant hillsides to developed land with structures, landscaping and modified open space areas. This change will be considered a significant adverse aesthetic impact by many people. In addition, cut and fill slopes for roadways and building pads will decrease the rural character of Agoura Hills. Although maturing of landscaping will soften the hard edges created by recent grading and buildings, it will be virtually impossible to retain a natural environment. Another aesthetic impact is the potential for development of a variety of different building styles in new development, some of which may be found unattractive by many people.

Impacts on the biological environment will be significant through loss of certain existing habitat areas. Much of the existing natural habitat in Agoura Hills is of high quality. In particular, the riparian woodland habitat is very ecologically important. Although little of this habitat remains within the city limits, there are several large riparian communities within the study area. Riparian communities support a broad spectrum of wildlife, including many raptor species. Additionally, the grassland habitat is important to the continuity of the raptor population in the Agoura Hills area. Another potential loss of habitat is destruction of oak woodland areas which while very suitable for development, also contain oak trees which are hundreds of years old. Habitat impacts will be mitigated through identification of the most important habitat areas for open space use.



Impacts on the man-made environment were also found to be potentially significant. The project will result in the need for development of a complete urban infrastructure of streets, utilities and other public facilities to serve newly developing areas. In addition, traffic generated by this development will add to traffic on the region's arterial and freeway system. Additional traffic will increase noise levels and local levels of air pollution. Visual quality will be affected by loss of open space within the City.

Impacts on public facilities and services will be mitigated by requiring all necessary facilities and services to be available at the time projects are ready for occupancy, and by requiring developers to construct most facilities or to pay fees to cover construction costs.



TABLE 1  
ENVIRONMENTAL IMPACT SUMMARY

ISSUE	ENVIRONMENTAL SETTING	POTENTIAL ENVIRONMENTAL IMPACT	MITIGATION MEASURES
Earth	Some slope instability problems in the area. Exposed to strong ground shaking.	Higher costs of site preparation and exposure of people and property to earthquake hazards.	Building codes require adequate site preparation and satisfactory seismic safety.
Air	Project is located in an area that does not meet National Ambient Air Quality Standards.	Some increase in local pollutant emissions and concentrations. Minor increase in regional pollutant levels.	Regional mitigation measures through Air Quality Management Plan. Local mitigation measures through required TSM actions by site users.
Surface and Ground Water	Area has some drainage deficiencies. Area may contribute to ground water recharge.	Some reduction in ground water recharge with coverage by impervious surfaces, regionally insignificant.	Adequate site drainage will be required by City.
Plant and Animal Life	Diverse plant and animal populations now exist in area.	Loss of vegetative and wildlife habitat including raptor foraging areas; decrease in wildlife mobility.	Preservation of wildlife and vegetative habitat in several areas including the Palo Comado SEA; preservation of all riparian habitat; clustering of development
Noise	Many noise-sensitive uses. Area generates some traffic noise.	Increase in traffic noise levels in adjacent areas. Construction noise.	Sound insulation required in new multi-family residential construction. Noise impact on existing units not feasible to mitigate.
Light and Glare	Project area now has building, street and parking lighting.	Parking lot, building and street lighting will be added by new development.	Project review will include review of lighting to minimize glare and offsite illumination.
Land Use	Project area includes residential and commercial uses. Project area also includes large amounts of vacant land.	Significant increase in intensity of development.	Mitigation measures for other impacts are intended to mitigate impacts of land use change.
Natural Resources	Project area not used for resource extraction.	Some nonrenewable resources will be consumed in construction and operation, insignificant regional level of resource consumption.	None.
Risk of Upset	Project area does not have hazardous use now. Fire is a regular occurrence in the study area.	No unique or unusual risks posed by project. Fire potential will increase.	Regulations by City and other agencies regarding storage and use of hazardous materials are expected to result in acceptable level of risk and to minimize the potential and damage caused by fire.
Population	Project area provides an estimated 3567 jobs.	Up to 22,945 additional jobs could be provided in project area. Area now an employment deficit area. Indirect and induced jobs in region.	Sufficient housing will be provided in the project area to meet the bulk of demand.
Housing	Approximately 8,000 existing residences in project area.	47% increase in residential units. Indirect housing impact large percentage of primary housing market demand.	Institution of programs for provision of low- and moderate-income housing.
Transportation/Circulation	Site has good arterial access. Traffic volumes are in general well below capacity except in the immediate vicinity of freeway ramps.	Potential to significantly degrade level of service at nearby intersections.	Improvements to arterial intersections and freeway access. Emphasis on transit improvements and TSM measures by site tenants. Site plan review for access and parking.





TABLE 1, Cont'd  
ENVIRONMENTAL IMPACT SUMMARY

ISSUE	ENVIRONMENTAL SETTING	POTENTIAL ENVIRONMENTAL IMPACT	MITIGATION MEASURES
Fiscal	Former Los Angeles County area now operated as contract city.	Commercial uses result in positive cash flow over time.	Fees to support capital facilities
Fire Protection	Site now has fire protection for developed areas only.	Existing water distribution system inadequate for proposed development. Additional fire manpower and equipment required based on annual review of city-wide requirements.	Water system improvements required to provide fire protection prior to occupancy. Fire Department review of development plans. Internal fire detection and suppression systems required.
Police Protection	Moderate police demand for current development.	Major increases in police demand, especially for residential areas.	Additional staff needs determined based on annual review of citywide needs.
School	School district currently overcrowded.	Direct increase in demand through housing impact.	Continuation of development fee assessment for provision of classrooms.
Energy	Project area consumes electric and gas energy for lighting, space and water heating and other uses.	Increase in energy consumption with increase in intensity of development.	Building codes require energy conservation measures.
Water Supply	The site now has adequate water for existing uses.	New water distribution lines required with new development	Developers required to install distribution lines. Some improvements constructed by City.
Sewer system	Sanitation district provide sewer collection and treatment.	Additional sewer collection lines and treatment capacity required with new developments.	Sanitation Districts will determine if capacity exceeded and will install additional facilities.
Storm Drainage	Area has some storm drain deficiencies.	Development may change drainage patterns and runoff rates, possibly significant beyond project area.	Developers required to provide adequate site drainage to storm drain system.
Power, Gas, Phone	Portions of project area now have utility service.	Services will be upgraded as required by utility providers as development takes place.	None.
Solid Waste	Regional management by Sanitation Districts of Los Angeles County. Potential long-term regional problem.	Adds to solid waste generation, insignificant at regional level.	None.
Human Health	No unique or unusual health hazards in project area.	No unique or unusual health hazards posed by project.	None.
Aesthetics	Site includes variety of land uses.	Undeveloped areas will be developed, potential for some mid-rise structures.	Design review by City.
Recreation	Project area provides some recreation facilities.	Increase in park and recreation demand with new development.	Project may involve some recreation improvements.
Archaeological/ Historical	Project area has potential to disturb unknown archaeological sites. Some known sites exist in the project area.	If archaeological sites are present, they are likely to be disturbed by construction.	Site preservation or excavation required. Contractors required to notify City if artifacts are found.



### 3.1 Earth

#### Environmental Setting

Agoura Hills is located in a relatively flat basin between the Santa Monica Mountains and a cluster of hills separating it from Simi Valley. The area is part of the Transverse Range. The formation of this mountain range began during the Paleocene and Miocene Epochs (70 million to 20 million years ago), with deposition of thousands of feet of sediment.

The area is bisected by a number of drainage courses, including Las Virgenes Canyon, Liberty Canyon, Lindero Canyon and Triunfo Canyon. The most prominent physical feature in the community is Ladyface Mountain, which at elevation 2036 feet (621 meters) is visible from nearly all points in the Agoura Hills area. A prominent ridgeline runs along Ladyface Mountain for nearly two miles.

There are several geologic constraints to development, including: soils, landslides, mudslides, slope and seismicity. These hazards will be individually discussed below, except for flood hazards which are discussed under Water, Section 3.3.

Clayey soils derived from volcanic and fine-grained sedimentary rocks comprise most of the soils of the Malibu/Santa Monica Mountains area (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-3). Typically, these soils have limited permeability and are shallow and expansive. Mountain areas are often devoid of soil either because slopes are too steep to allow soil formation or erosion has stripped it all away.

Most of the soils of the Malibu/Santa Monica Mountains area have limitations depending on soil characteristics and intended use. For example, the efficiency of an effluent disposal system based on spray irrigation is dependent on the inherent ability of a soil to absorb and transmit water.

Indications of long-past, prehistoric slope instabilities or related slope stability problems are particularly evident within the thin-bedded, clay-rich portions of the Topanga, Calabasas, and Modelo Formations where natural erosion processes removed lateral support by slope undercutting. Others have occurred in the older formations which are, on the average, more stable. However, they are considerably less abundant or widespread in the older formations.

The largest landslides mapped within the study area are located near Las Virgenes Road, north and south of the



Ventura Freeway. The largest of these encompasses approximately 175 acres. Rather than being a single landslide, however, it appears to be a complex series of ancient slides. Many of these may be relatively stable at present.

Although landsliding can result from improper grading practices, no major structural damage apparently has occurred in the city as a result of deep-seated bedrock instability caused by development grading. Superficial slides, however, have occurred locally on graded cut and fill slopes in a few tract developments. One such problem area has been in Liberty Canyon, south of the Ventura Freeway. The majority of shallow slope failures occur on the moderate to steep, soil-covered natural slopes. Such potential slope failures pose significant hazards to life and property.

Mudslides and erosion are the shallower types of slope failure, usually affecting the upper soil mantle or weathered bedrock underlying natural slopes and triggered by surface or shallow subsurface water. Important factors related to mudslide (mudflow) risks are the depth and type of soil present; the direction and angle of slope; surface drainage configuration; and type and condition of natural ground cover.

Within the study area, the finer-grained portions of those formations most susceptible to deep-seated landsliding are also usually the most prone to mudslides, slumps and erosion. Historically, mudslides are most common during or shortly after a heavy rainfall or series of rainfalls (such as occurred during the winter of 1968-69). Unfortunately, these can occur with great suddenness and destructive force, and are one of the leading risks to life related to slope stability hazards in Southern California.

Over 80% of the soils in the Malibu/Santa Monica Mountains area have high or very high erosion potential (very high is the maximum degree of erodibility determined by the U. S. Department of Agriculture Soil Conservation Service), (Santa Monica Mountains Comprehensive Plan, p. 12.) Vegetation is extremely important to maintaining soil stability. The root systems of chaparral and sage, two common plants in the area, are particularly effective in holding the highly erodible soils covering the steep slopes.





Much of the terrain in the Santa Monica Mountains is rugged and steep. Elevations in the Agoura Hills area range from 600 feet to approximately 2,000 feet above sea level. The table below summarizes slope in the study area and the City of Agoura Hills based on analysis of U. S. Geological Survey 7 1/2 minute topographical maps.

TABLE 2  
SLOPE DISTRIBUTION  
Areas in Acres

Slope Category	City of Agoura Hills		Study Area		Total	
	Area	%	Area	%	Area	%
0-5% Slope	954	19%	489	4%	1,443	8%
5-10% Slope	868	18%	1,177	10%	2,045	12%
10-25% Slope	1,313	27%	3,434	28%	4,747	27%
25-50% Slope	1,162	24%	4,913	40%	6,075	35%
50% + Slope	<u>646</u>	13%	<u>2,371</u>	19%	<u>3,017</u>	17%
	4,942		12,383		17,327	

Source: The Arroyo Group

Slope is the most significant development constraint in the Agoura Hills General Plan study area. Steep slopes make development difficult and costly and, if permitted to develop, in general result in high average costs of providing public services. However, steep slope areas developed at low density provide significant privacy and excellent views, and are generally the location of the most expensive homes. Steep slope areas are also desirable for resort and second home cabin developments.

In general, areas with up to 5% slope are suitable for large structures and industrial developments. Slopes up to 10% are generally suitable for most other types of development without great attention to slope in subdivision design. Slopes of greater than 10% begin to affect design, requiring attention to slope in design of roadways to minimize roadway gradients and provide suitable drainage. At slopes greater than 15%, it becomes difficult to develop along both sides of a roadway, and at slopes between 25% and 50% development becomes difficult, requiring extensive grading or careful selection of sites at relatively low density.



Much of the area with slopes less than 10% in the study area has already been developed, and development is now reaching more difficult areas. (See slope map, p. 17.)

The Agoura Hills area lies within the Transverse Ranges which form a major structural block of the earth's crust, between the San Gabriel and San Andreas faults (on the northeast) and the Malibu Coast and Anacapa-Santa Monica faults (on the south), as well as major earthquake epicenters (Richter Magnitude greater than 6). Other named, but shorter, significant faults in the nearby areas include the Boney Mountain and Sycamore Canyon faults in the Thousand Oaks area, and the Liberty Canyon fault in the Malibu area, extending into the southeast portion of the study area. None of the latter faults, however, is known to be active.

The more significant and longer faults in the study area are the Liberty Canyon fault and several unnamed faults in the southeast and southwest portions; refer to Figure 6. None of the faults, however, is considered to be a major or potentially active fault and, as such, none of these faults are designated as Alquist-Priolo Seismic Special Study Zones. Other shorter, presumably inactive faults are also present within other portions of the study area.

Environmental  
Impact

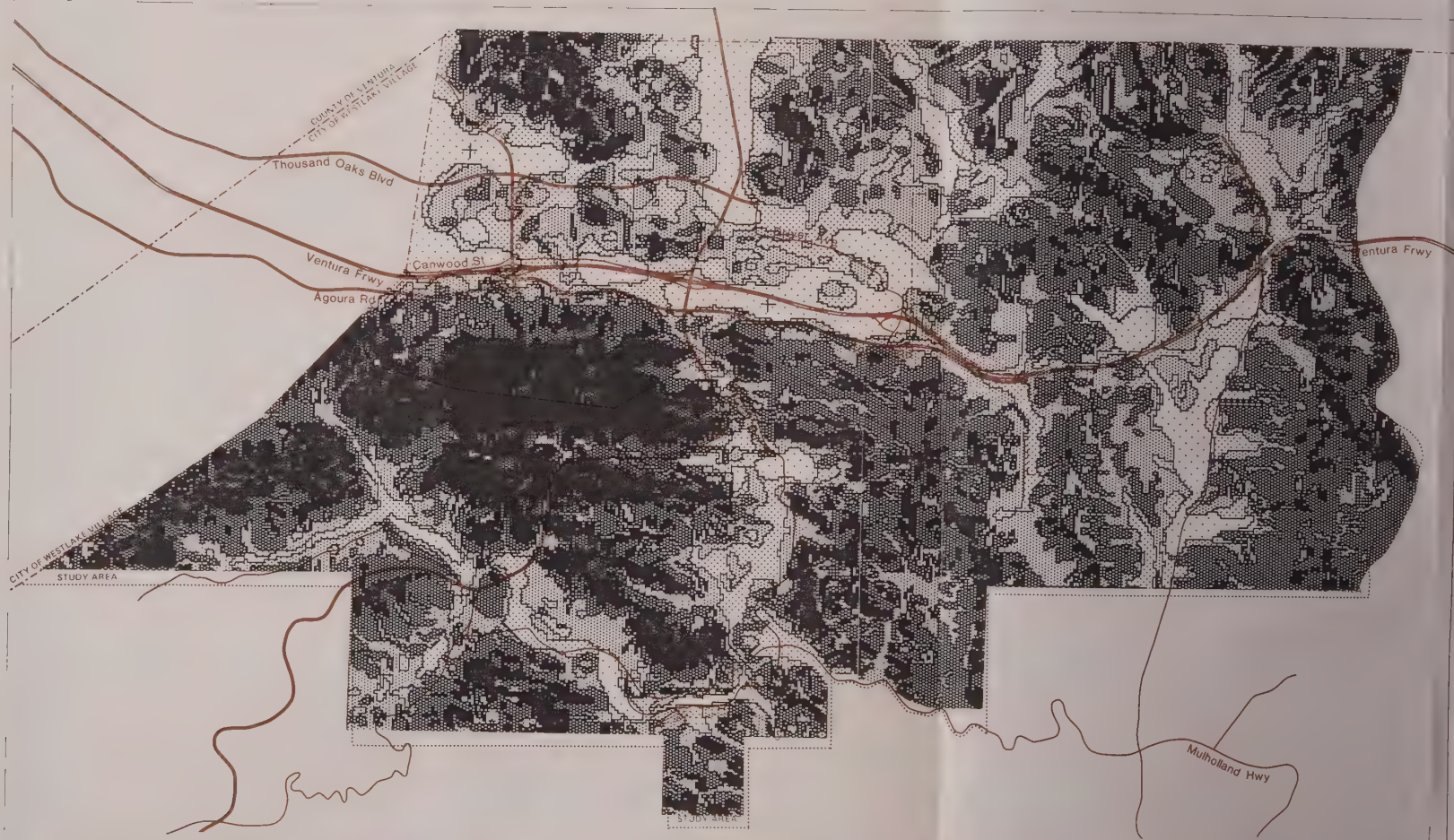
Slope stability hazards not only cause erosion, but erosion leads to problems of runoff and siltation. (See slope stability map, p. 18.) Increases in runoff and siltation, in turn, negatively impact coastal streams and/or significant vegetative communities. This runoff and siltation problem is not local in nature. Many of the watershed areas of Agoura Hills run directly into Federal or State Park areas and some flooding caused by siltation has already occurred in Malibu Lake.

A paradox exists between fire prevention methods and erosion potential. Generally, there are more erodible soils on steeper slopes. When grading and brush removal occur to satisfy development demands and its accompanying brush removal for fire prevention, erosion potential dramatically increases. Further, every 10% increase in slope doubles the speed at which fire spreads (Santa Monica Mountains Comprehensive Plan, p. 11). Methods to decrease fire potential, then, decrease slope stability.

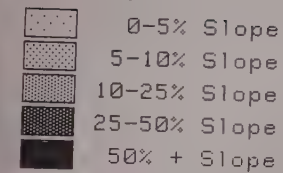
Another impact related to slope and fire is the necessary construction of fire roadways for fire equipment to reach fires that may occur on developments located on steep slopes. Even when provided, the steep gradients, narrow roadways and tight curves often required to serve steep slope areas reduce the ability





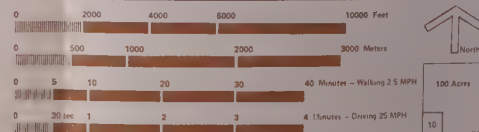


### Slope



**FIGURE 3**  
**SLOPE**

**AGOURA HILLS**  
**GENERAL PLAN EIR**



*The Strong Group*  
PLANNERS & ARCHITECTS  
Gordon Aschman Associates, Inc.  
Williams Kuebelbeck Associates  
Leighton & Associates





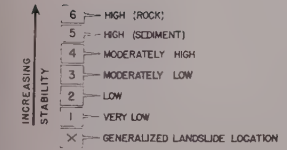
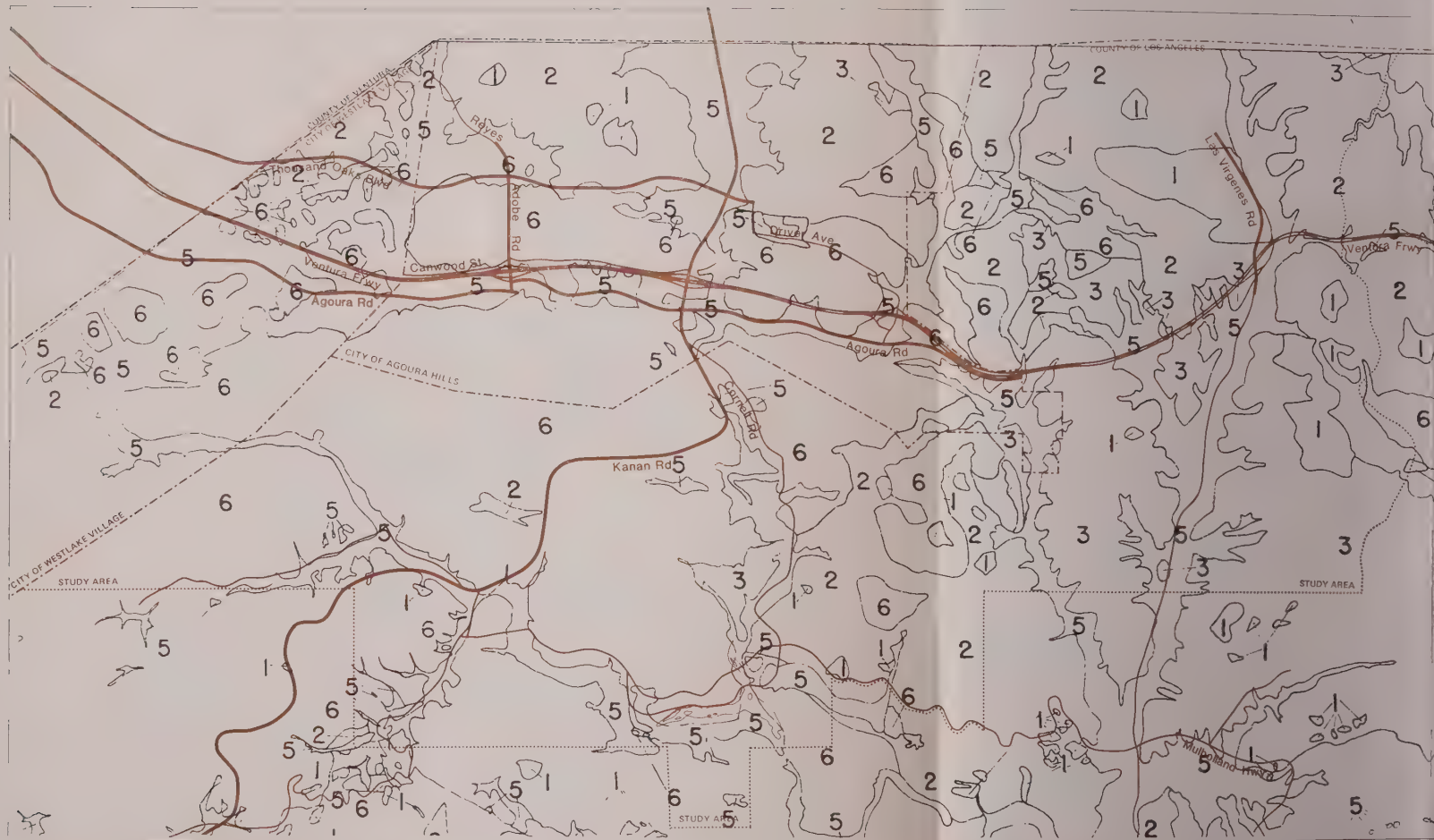


FIGURE 4.  
SLOPE STABILITY

**AGOURA HILLS  
GENERAL PLAN EIR**



**Barton-Atchman Associates**  
Williams-Kuebelbeck Associates  
Leighton & Associates



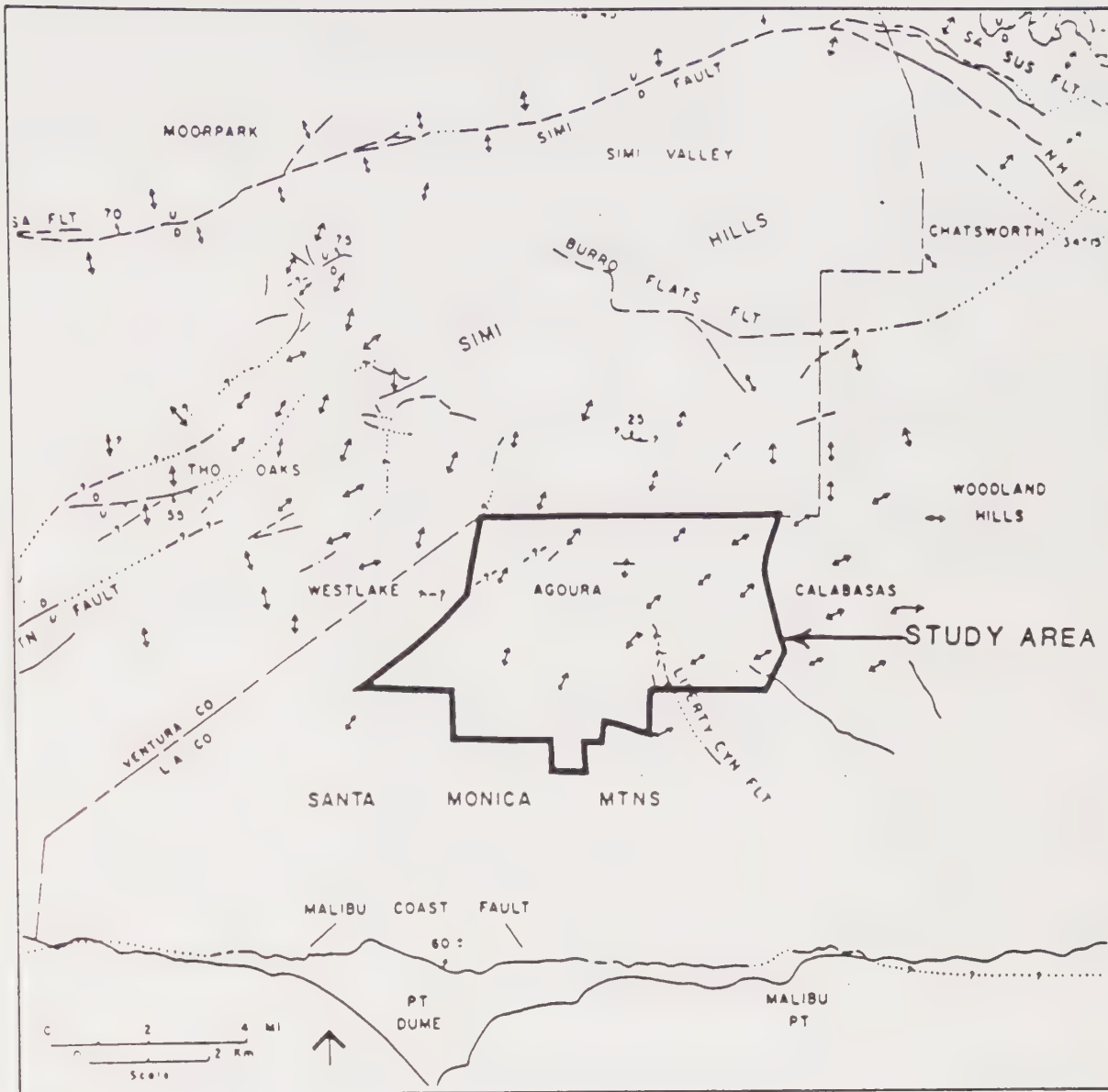


Figure 6.  
LOCAL AREA FAULTS



of fire equipment to reach fires. Additionally, steep slope areas are often the highest areas developed in a community, and may require additional pumping stations and reservoirs at higher elevations to provide adequate water service and pressure.

The infrastructure costs associated with development on steep slopes is not limited to fire suppression activities. Since adequate sites and access can in general be provided only at a lower than normal development density on steep slopes, increases in the amount of street and utility lines installed per dwelling unit served and increases in service costs to municipal agencies often result.

Construction on steep slopes also impacts the aesthetics of the community. Slope areas are much more visible to surrounding areas than flatter areas, and unattractive developments have adverse impacts over a wide area. Some types of construction used in steep slope areas result in large unbroken flat surfaces, bare slopes and prominent cut and fill areas for roadways which are generally considered unattractive.

Inasmuch as none of the faults within the study area is classified as active, the provisions of the Alquist-Priolo Special Studies Zone Act (which regulates the construction of habitable structures within designated active fault zones) do not apply. Consequently, the fault rupture risk is considered to be negligible and no special land-use planning restrictions are necessary along known faults. Faults or fault zones, however, can pose non-seismic hazards such as slope instability which could result from the weakening effect of shearing, pulverizing and water entrapment sometimes caused by faulting.

#### Mitigation Measures

Many of the problems associated with unstable slopes can be lessened or avoided through development controls. If development occurs in areas sensitive to slope instability, only very low land densities should be allowed. Further mitigation can be accomplished by individual project review since it may not be possible to determine potential slope problems unless geologic studies are prepared for site-specific areas. The recently-adopted Hillside Development Ordinance by the City of Agoura Hills will greatly decrease the potential impacts associated with hillside development.

The impacts of grading to provide suitable building sites, provide for suitable local and arterial street alignments and to remedy geologic problems will result in modification of the topography of some of the undeveloped areas. This modification will be limited by





adherence to Conservation Element policies of the Proposed General Plan calling for minimum grading and design to existing topography. The most important physiographic features of the undeveloped areas have been identified by City staff, advisory committee members and the consultant. These features have been identified as open space areas on the general plan land use map to insure that they continue to provide definition to the City as development takes place.

Building code and grading code provisions will be assumed to provide an acceptable level of protection from seismic risk, and development under the General Plan is assumed to result in no significant seismic safety impacts.



### 3.2 Air Quality

#### Environmental Setting

Agoura Hills is located at the northern extreme of the South Coast Air Basin. To a large extent, air pollution within the basin is a regional problem. Because of its location within the air basin, however, Agoura Hills is normally not significantly affected by pollutants emitted in other areas except during Santa Ana conditions.

Table 3 summarizes 1982 air pollution concentrations at the Reseda monitoring station, the station closest to Agoura Hills in the monitoring network. Data for ozone levels are also provided from the Thousand Oaks monitoring station. This station is closer to Agoura Hills and the ozone levels are probably more representative of Agoura Hills' air quality than are the Reseda levels. Unfortunately, levels for other pollutants are not measured at the Thousand Oaks monitoring station. Concentrations for selected other stations in the network are also reported for comparison.

The South Coast Air Basin is a coastal plain bounded by the Pacific Ocean on the southwest quadrant and high mountains on the remainder of the perimeter. Because of low average wind speeds and common temperature inversions, pollutants have significant potential to accumulate within the basin and produce secondary pollutants through chemical reactions.

During the winter months, the principal problem in the basin is high concentrations of carbon monoxide resulting from extremely low inversions and very low nighttime wind speeds.

#### Environmental Impact

Air Pollutant Effects. Air pollutants have a number of adverse impacts on human health, result in degradation of materials and finishes, and are harmful to sensitive plants. The sources and effects of the various contaminants are discussed briefly below, based on information from the South Coast Air Quality Management District.

Carbon Monoxide (CO). Carbon monoxide is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances. Carbon monoxide concentrations are generally higher in the winter when more fuel is burned and meteorological conditions favor the build-up of directly emitted contaminants. In the South Coast Air Basin, gasoline-powered motor vehicles are the largest source of this contaminant.

Carbon monoxide does not irritate the respiratory tract but passes through the lungs directly into the blood



TABLE 3  
NUMBER OF DAYS STATE STANDARDS WERE EXCEEDED  
AND ANNUAL MAXIMUM  
1983

AREA	OZONE		CARBON MONOXIDE <sup>c)</sup>		SULFUR DIOXIDE <sup>d)</sup>		NITROGEN DIOXIDE	
	Days <sup>a)</sup>	Max <sup>b)</sup>	Days	Max	Days	Max	Days	Max
LOS ANGELES COUNTY								
Los Angeles	114	0.26	10	17	0	0.07	5	0.33
Azusa	151	0.39	0	10	0	0.03	1	0.26
Pasadena	159	0.34	8	19	0	0.05	5	0.35
West L.A.	84	0.23	12	22	0	0.06	4	0.47
Reseda	112	0.26	14	20	0	0.03	0	0.23
ORANGE COUNTY								
Anaheim	74	0.30	5	17	0	0.05	0	0.24
La Habra	100	0.27	6	22	0	0.05	3	0.33
Costa Mesa	41	0.25	1	14	0	0.04	1	0.27
El Toro	54	0.29	0	7	NM	NM	NM	NM
Los Alamitos	42	0.20	NM	NM	0	0.05	NM	NM
RIVERSIDE COUNTY								
Riverside	152	0.36	0	8	0	0.02	0	0.19
SAN BERNARDINO COUNTY								
San Bernardino	147	0.36	0	9	0	0.02	0	0.19
VENTURA COUNTY								
Thousand Oaks	73	0.19	NM	NM	NM	NM	NM	NM

a) Days - number of days exceeding state standard for indicated pollutant.

b) Max - single highest 1-hour (for SO<sub>2</sub> 24-hour) average of the year in parts per million.

c) All exceedances are of the 8-hour standard. The 1-hour standard was not exceeded.

d) All exceedances and maxima are of the 24-hour standard. The 1-hour standard was not exceeded.

\* Less than 12 months of data.

NM - not measured.

Source: South Coast Air Quality Management District, Air Quality Data, 1983





TABLE 3, Cont'd

NUMBER OF DAYS/MONTHS STATE STANDARDS WERE EXCEEDED  
AND ANNUAL MAXIMUM DAILY/MONTHLY AVERAGES  
1983

AREA	TSP		SULFATE		LEAD		No. of Sampling Days <sup>d</sup>
	Days <sup>a</sup>	Max <sup>b</sup>	Days <sup>a</sup>	Max <sup>b</sup>	Months <sup>a</sup>	Max <sup>c</sup>	
LOS ANGELES COUNTY							
Los Angeles	22	173	1	25.7	0	1.88	60
Azusa	24	220	1	25.8	0	1.07	55
Pasadena	16	181	1	26.8	0	1.17	49
West L.A.	4	156	0	20.0	0	1.63	59
Reseda	3	131	0	22.5	0	1.79	59
ORANGE COUNTY							
Anaheim	11	176	0	24.4	0	1.47	60
La Habra	16	204	0	19.7	0	1.59	56
Costa Mesa	NM	NM	NM	NM	NM	NM	NM
El Toro	5	158	0	21.2	0	0.74	57
Los Alamitos	16	175	1	26.3	0	1.52	58
RIVERSIDE COUNTY							
Riverside	37	285	1	27.1	0	0.92	58
SAN BERNARDINO COUNTY							
San Bernardino	27	223	1	27.1	0	0.88	56

a Number of days/months exceeding state standard for indicated pollutant.

b Single highest 24-hour average of the year in ug/m<sup>3</sup>.

c Single highest monthly average of the year in ug/m<sup>3</sup>.

d Measurements are normally made on every sixth day.

NM - not measured.

Source: South Coast Air Quality Management District, Air Quality Data, 1983



TABLE 4  
NUMBER OF DAYS FEDERAL STANDARDS WERE EXCEEDED  
1983

MONITOR STATION LOS ANGELES COUNTY	OZONE <sup>a)</sup>	CARBON MONOXIDE <sup>b)</sup>	SULFUR DIOXIDE <sup>c)</sup>	TSP <sup>d)</sup>	LEAD <sup>e)</sup>
Los Angeles	69	8	0	4	0
Azusa	123	0	0	12	0
Pasadena	122	8	0	2	0
West L.A.	37	12	0	1	0
Reseda	67	14	0	0	0
ORANGE COUNTY					
Anaheim	40	3	0	2	0
La Habra	64	6	0	6	0
Costa Mesa	15	1	0	NM	NM
El Toro	24	0	NM	1	0
Los Alamitos	16	NM	0	1	0
RIVERSIDE COUNTY					
Riverside	121	0	0	28	0
SAN BERNARDINO COUNTY					
San Bernardino	117	0	0	15	0
VENTURA COUNTY					
Thousand Oaks	27	NM	NM	NM	NM

- a) Based on number of days O<sub>3</sub> 0.12 ppm, 1-hour average.  
b) Based on number of days CO 9 ppm, 8-hour average.  
(The 1-hour average was not exceeded.)  
c) Based on number of days SO<sub>2</sub> 0.14 ppm, 24-hour average.  
d) Based on number of days TSP 260 ug/m<sup>3</sup>, 24-hour average.  
e) Based on number of quarters Pb 1.5 ug/m<sup>3</sup>, quarterly average.  
\* Less than 12 months of data.  
NM - not measured.

Source: South Coast Air Quality Management District, Air Quality Data, 1983



stream and, by interfering with the transfer of fresh oxygen to the blood, deprives sensitive tissues, primarily the heart and brain, of oxygen. It is not known to have adverse effects on vegetation, visibility or material objects.

Oxides of Nitrogen (NO<sub>x</sub>). Two oxides of nitrogen are important in air pollution. These are: nitric oxide (NO), a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure; and nitrogen dioxide (NO<sub>2</sub>), a reddish-brown irritating gas formed by the combination of nitric oxide with oxygen. Motor vehicles are the primary source in the region, along with combustion in power plants. Some petroleum refining operations, other industrial sources, ships, railroads and aircraft operations are less important sources.

Oxides of nitrogen are direct participants in photochemical smog reactions. The emitted compound, nitric oxide, combines with oxygen in the atmosphere, in the presence of hydrocarbons and sunlight, to form nitrogen dioxide and ozone. Nitrogen dioxide, the most significant of these pollutants, is a reddish-brown gas which can color the atmosphere at concentrations as low as 0.5 ppm on days of 10-mile visibility. It is considered to be a major air pollutant in the region because it is a primary receptor of ultraviolet light which initiates the reactions producing photochemical smog.

Sulfur Dioxide (SO<sub>2</sub>). Sulfur dioxide is a colorless, pungent irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. In humid atmospheres, some of it may be changed to sulfur trioxide and sulfuric acid mist, with some of the latter eventually reacting with other materials to produce sulfate particulates.

This contaminant is the natural combustion product of sulfur or sulfur-containing fuels. In the South Coast Air Basin, fuel combustion is the major source while chemical plants, sulfur recovery plants, and metal processing are minor sources. Introduction of low sulfur fuel oil, beginning in 1968, lowered SO<sub>2</sub> emission. The recent shortages of natural gas have forced a greater use of low sulfur fuel oil, thus possibly adversely affecting air quality.

At sufficiently high concentrations sulfur dioxide irritates the upper respiratory tract; at lower concentrations, in combination with particulates, it appears able to do still greater harm by injuring lung tissues. Sulfur oxides, in combination with moisture and oxygen, can yellow the leaves of plants, dissolve marble and eat away iron and steel. Sulfur oxides can also limit visibility and cut down the light from the sun.





Photochemical Oxidant (O<sub>x</sub>). The term "photochemical oxidant" can include several different pollutants, but consists primarily of ozone (more than 90 percent) and a group of chemicals called organic peroxy nitrates, which comprise only a small percentage of the total. Photochemical oxidants are created in the atmosphere and are not emitted directly into the air. Reactive hydrocarbons and oxides of nitrogen are the emitted contaminants which participate in the reaction. Ozone is a pungent, colorless toxic gas which is produced by the photochemical process. Photochemical oxidant is a characteristic of Southern California type smog, and reaches its highest concentrations during the summer and early fall when ultraviolet energy from the sun and other conditions are most suitable for oxidant--producing reactions. Motor vehicles are the major source of emission of oxides of nitrogen and reactive hydrocarbons (principal ozone precursors) in the South Coast Air Basin.

The common effects of oxidants are damage to vegetation and cracking of untreated rubber. Photochemical oxidants in high concentrations can also directly affect the lungs, causing respiratory irritation and possible changes in lung functions.

Particulates. Atmospheric particulates are made up of finely divided solids or liquids such as soot, dust, aerosols, fumes and mists. About 90% by weight of the emitted particles are larger than 10 microns, but about 90% of the number of particulates are less than 5 microns in diameter. The aerosols formed in the atmosphere are usually smaller than 1 micron. In areas close to major sources, particulates are generally higher in the winter, when more fuel is burned, and meteorological conditions favor the build-up of directly-emitted contaminants. However, in areas remote from major sources and subject to photochemical smog, particulates are higher during summer months.

Particulate matter consists of particles in the atmosphere resulting from many kinds of dust and fume-producing industrial and agricultural operations, construction, from combustion products, including automobile exhaust, and from atmospheric photochemical reactions. Some natural activity such as wind-raised dust and ocean spray also put particulates into the atmosphere.

In the respiratory tract, very small particles of certain substances may produce injury by themselves, or may act in conjunction with gases to alter their deposition sites and scope of action. Suspended in the air, particulates of aerosol size can both scatter and



absorb sunlight, reducing the amount of solar energy reaching the earth, producing haze and reducing visibility. They can also cause a wide range of damage to materials.

Hydrocarbons and Other Organic Gases. Any of the vast family of compounds consisting of hydrogen and carbon in various combinations, found especially in fossil fuels, are known as hydrocarbons. Many hydrocarbon compounds are major air pollutants and those which can be classified as olefins or aromatics are highly photochemically reactive. Atmospheric hydrocarbon concentrations in general are higher in winter because the reactive hydrocarbons react more slowly in the winter and can accumulate in the atmosphere to higher concentrations.

The major source of reactive hydrocarbons in the South Coast Air Basin is now the internal combustion engine or motor vehicles, with minor sources including evaporation of organic solvents and petroleum refining and marketing operations.

Certain specific hydrocarbons, such as ethylene, damage plants by inhibiting growth and causing flowers and leaves to fall. Levels of hydrocarbons currently measured in urban areas are not known to cause adverse effects in humans. However, certain members of this contaminant group are extremely important components in the reactions which produce photochemical oxidant.

Project  
Emissions

The project will result in increases in local concentrations of primary pollutants and in increased contribution to regional emissions and pollutant concentrations relative to the "no development" case. Because of Agoura Hills' location, local emissions are not expected to significantly influence regional pollution levels.

Air quality in Agoura Hills can be expected to continue to exceed the national ambient air quality standard for ozone as a result of regional pollution problems, and can be expected to continue to exceed the national ambient air quality standard for carbon monoxide resulting from local emissions from motor vehicles under unusual conditions.

The table below summarizes air pollution emissions for the general plan proposed land uses at full development compared to the "no development" case.



TABLE 5  
PROJECT EMISSIONS

EMISSION SOURCE	CITY						STUDY AREA					
	Daily Usage	Emissions in Pounds per Day					Daily Usage	Emissions in Pounds per Day				
		CO	HC	NOx	SOx	Part		CO	HC	NOx	SOx	Part
EXISTING USE												
Gas Consumption	1.25 mcf	25	10	150	0	0	0.55 mcf	11	4	66	0	0
Electric power	144 mwh	30	19	302	202	26	47 mwh	10	6	99	66	8
Mobile source	458 thous mi	12,988	1,165	2,148	243	334	150 thous mi	4,254	382	703	80	110
TOTAL EXISTING USE		13,043	1,194	2,600	445	360	4,275		392	868	145	118
PROPOSED USE												
Gas Consumption	2.48 mcf	50	20	298	0	0	2.33 mcf	47	19	280	0	0
Electric power	428 mwh	90	56	899	599	77	263 mwh	55	34	552	368	47
Mobile source	1338 thous mi	37,962	3,405	6,278	711	977	846 thous mi	23,994	2,152	3,968	449	618
TOTAL PROPOSED		38,102	3,481	7,474	1,310	1,055	24,096		2,205	4,800	817	665
CHANGE FROM EXISTING												
Gas Consumption	1.23 mcf	25	10	148	0	0	1.78 mcf	36	14	214	0	0
Electric power	284 mwh	60	37	596	398	51	216 mwh	45	28	454	302	39
Mobile source	881 thous mi	24,975	2,240	4,130	468	643	696 thous mi	19,740	1,771	3,264	370	508
TOTAL CHANGE		25,059	2,287	4,874	865	694	19,821		1,813	3,952	672	547
AS % OF SOURCE/RECEPTOR AREA 4, 1987 (Note 1)												
		CO		NOx		ROG		CO		NOx		ROG
		Tons	%	Tons	%	Tons		Tons	%	Tons	%	Tons
Existing Use		6.5	1.8%	1.3	1.3%	0.6		2.1	0.6%	0.4	0.4%	0.2
Proposed Use		19.1	5.3%	3.7	3.7%	1.7		12.0	3.3%	2.4	2.4%	1.1
Change from Existing		12.5	3.5%	2.4	2.4%	1.1		9.9	2.7%	2.0	2.0%	0.9
Source/Receptor Area 4		362	100.0%	101	100.0%	88		362	100.0%	101	100.0%	88
Basin Total		6,228		959		1,002		6,228		959		1,002

Abbreviations: mcf: million cubic feet; mwh: megawatt-hours; mi: miles

Notes: 1. Source/Receptor Area 4 and Basin Total Emissions from South Coast Air Quality Management District, Air Quality Handbook for Environmental Impact Reports, Revised December, 1983

Air pollution impacts resulting from the general plan include increases in vehicle miles traveled in the planning area, increases in emissions relating to construction, increases in emissions from use of electric power and natural gas, and increases in number of people exposed to levels of air pollution exceeding the national ambient air quality standard.

#### Mobile Source Emissions

Development will increase Agoura Hills' contribution to regional air pollution emissions and resulting background levels of primary pollutants and generation of secondary pollutants relative to the no development case.

Estimated total direct and indirect air pollution emissions from Agoura Hills land uses are summarized in Table 5. These emissions are based on the emission factors of Table 7.





TABLE 6  
CALIFORNIA COMPOSITE MOVING EXHAUST EMISSION RATES  
CALENDAR YEAR 1988

Speed	% of Miles	Emissions in Grams per Mile					
		CO	THC	NMHC	NOx	SOx	Part
IDLE	1%	2.30	0.21	0.18	0.06	-	-
5	1%	61.80	5.80	4.99	2.07	0.24	0.33
10	2%	33.71	3.19	2.75	1.79	0.24	0.33
15	4%	24.17	2.27	1.96	1.69	0.24	0.33
20	5%	19.46	1.81	1.56	1.70	0.24	0.33
25	7%	16.24	1.50	1.29	1.75	0.24	0.33
30	10%	13.72	1.26	1.08	1.82	0.24	0.33
35	10%	11.85	1.08	0.93	1.90	0.24	0.33
40	10%	10.66	0.96	0.83	1.98	0.24	0.33
45	10%	10.12	0.89	0.77	2.09	0.24	0.33
50	15%	9.96	0.86	0.74	2.26	0.24	0.33
55	20%	9.50	0.81	0.70	2.56	0.24	0.33
60	5%	7.89	0.67	0.58	3.08	0.24	0.33
Weighted Average	1.00	12.82	1.15	0.99	2.12	0.24	0.33
Crankcase Blowby:			0.000	0.000			
Diurnal Emissions:							
(Grams/day)			3.22	3.22			
(Grams/mile)			0.13	0.13			
Hot Soak:							
(Grams/soak)			1.41	1.41			
(Grams/mile)			0.21	0.21			
TOTAL		12.82	1.49	1.33	2.12	0.24	0.33

Assumptions: Ambient temperature 75 degrees fahrenheit.

Operation percentage:		Vehicle mix percentage of total:	
Cold Start:	21%	Light duty auto:	77.4%
Hot Start:	27%	Light duty truck:	10.6%
Hot Stabilized:	52%	Medium duty truck:	5.5%
		Heavy duty gas truck:	2.0%
		Heavy duty diesel truck:	3.8%
		Motorcycle:	0.9%

Source: South Coast Air Quality Management District, "Air Quality Handbook for Environmental Impact Reports", December 1983. Based on California Air Resources Board EMFAC6D Rates.



TABLE 7

## AIR POLLUTION EMISSION FACTORS

	CO	HC	NO <sub>x</sub>	SO <sub>x</sub>	Particulates
Natural Gas Consumption, lbs/million cubic feet <sup>1</sup>	20	8	120	*	0.15
Electric Power Generation, oil fired, lbs/mwh <sup>1</sup>	0.21	0.13	2.10	1.40	0.18
Vehicle miles, 1990 grams per mile <sup>2</sup>	12.82	1.15	2.12	0.24	0.33

1. South Coast Air Quality Management District, Air Quality Handbook for Environmental Impact Reports, Revised 1983.

2. From table 6.

\* = negligible

Development will also increase local levels of primary pollutants relative to the no development case by increasing vehicle traffic on local arterials. Because background levels of carbon monoxide have the potential to exceed the national ambient air quality standard now at the Reseda monitor station, local levels of carbon monoxide associated with arterials and the freeway in Agoura Hills may result in additional days on which the national ambient air quality standard would be violated, or in increases in the length of time standards are exceeded.

Mitigation  
Measures

Mitigation measures included in the General Plan include measures to reduce vehicle miles traveled and measures to reduce energy consumption.

Measures to reduce vehicle miles traveled in the General Plan include those measures discussed under circulation in Section 3.12.

Agoura Hills is subject to requirements of the regional Air Quality Management Plan. The regional air quality management plan is intended to achieve compliance with national ambient air quality standards for the region by the federally mandated 1987 deadline. Among the measures that may be included in an approved Air Quality Management Plan are the following:

- o Additional restrictions on vehicle emissions.



- o Annual inspection and maintenance program for light and medium duty vehicles.
- o Transportation control measures including encouragement of high occupancy vehicles, physical improvements to roadways and transit system improvements.
- o Additional stationary source controls.

The Air Quality Management Plan is based on SCAG projections for population growth in the South Coast Air Basin. The Agoura Hills General Plan is consistent with these SCAG projections, and will therefore be consistent with the assumptions of the regional AQMP.

Measures to reduce energy consumption are discussed under energy in Section 3.14.





### 3.3 Water Quality

#### Environmental Setting

The Las Virgenes Municipal Water District provides sewage treatment for the Agoura Hills study area. Wastewater flows by gravity to Malibu Canyon and then to the Tapia Water Reclamation Facility. Private septic systems are also used in the study area and will most likely continue to be used due to environmental and cost constraints of an expanded public sewage system. Within the city limits, however, increases in urbanization will make public sewer expansion economically viable for most residents.

The water quality in Agoura Hills is affected by the quality of effluents treated at the Tapia Water Reclamation Facility and the failure of septic tank systems. Additionally, runoff contributes to decreased water quality. Population increases in Agoura Hills increase the potential for water pollution from all three of these sources.

There are three major drainage basins in the Agoura Hills study area (see Map, p. 34). Runoff from the Agoura, Kanan and Cornell areas and from areas north of the Ventura Freeway is collected by the Medea Creek drainage basin. A wide variety of vegetation exists in this area. A riparian woodland community, which has been altered through channelization, exists along Medea Creek; a significant oak woodlands community is also present.

Surface water from portions of Ventura County, Triunfo and Lobo Canyons, Malibu Lake and Malibu State Park is collected by the Triunfo Canyon watershed. All of this surface water flows into the Malibu Creek watershed and eventually the ocean. Vegetation consists mainly of chaparral in the mountain areas and woodlands near the canyon bottoms.

The Las Virgenes Creek watershed includes Las Virgenes Creek, Liberty Canyon, portions of Malibu Creek State Park and Stokes Canyon. Las Virgenes Creek also flows into the Malibu Creek watershed. A wide range of habitats exist in this watershed. Riparian communities along the creek south of the Ventura Freeway are particularly important.

#### Flooding

Flooding is a common hazard in the Santa Monica Mountains, with streams periodically flooding during heavy rains. In 1977-78, flood damage occurred in Triunfo Creek (Santa Monica Mountains Comprehensive Plan, p. 14). Most streams in the mountains have natural channels with little flood control improvement. These natural channels support important wildlife habitats, most importantly, riparian communities.



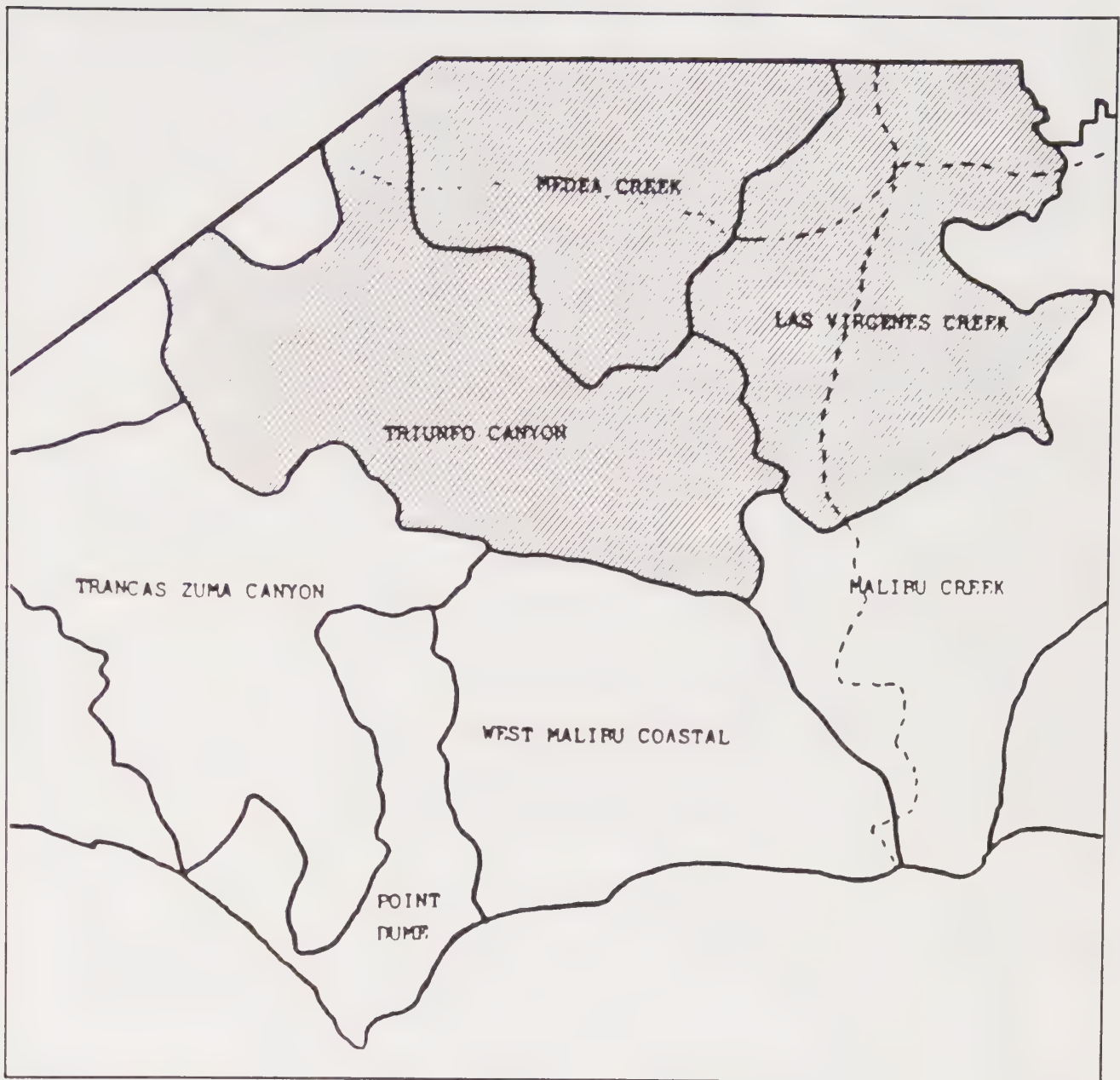


Figure 7.  
PROJECT AREA WATERSHEDS



The Los Angeles County Flood Control District is currently gathering data to define areas along flood plains where grading or building is not acceptable if such development increases the flood hazard to adjacent properties by either increasing the capital flood water surface elevation, deflecting flows or increasing bank erosion. The portion of the flood plain that poses the most significant threat of flooding has been defined as the "floodway" and includes the channel of the stream itself as well as that portion of the adjacent flood plain lands required to carry off peak flood waters.

These floodways have been defined for the Las Virgenes Creek, Cheeseboro, Palo Comado and portions of Medea Canyons. The County of Los Angeles has adopted the floodway ordinance (Section 308 of the Los Angeles County Building Code) for Las Virgenes Creek. Work is still underway to define floodways for the remainder of Medea Creek, Liberty, Lindero and Triunfo Canyons.

Environmental  
Impact

A septic tank filter field is part of the septic tank system designed to dispose of effluent. The functioning of septic tank filter fields is affected by soil features such as permeability, percolation rate, depth to water table and depth to impervious bedrock or hardpan (Soils of the Malibu Area, p. 49). Almost the entire study area has been determined to have severe soil limitations for septic tank filter fields. The extent of water pollution problems as a result of septic system failure is not known because a comprehensive study of septic tank pollution has not been completed for the Agoura Hills area.

The Tapia Water Reclamation Facility currently has a capacity of 8.0 MGD. Growth in the Agoura Hills area can be accommodated given that irrigation spraying would be the means to dispose of capacity effluent. 1.25 million gallons of effluent per year are currently disposed of by spray irrigation (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-67). There are several drawbacks to spray irrigation over effluent discharge into Malibu Creek, including: the need for sites at low levels to prevent erosion and runoff (these sites are often more economical in residential rather than rural uses); some potential spray fields contain native oaks which cannot be watered in the summer; other suitable areas have recreational use which would be destroyed through spraying. The ability of the Las Virgenes Municipal Water District to meet water quality standards of the State Water Resources Board (i.e. installation of disinfection and filtration systems) will determine the likelihood of possible discharge treated effluent into Malibu Creek.





The City of Agoura Hills and the Las Virgenes Municipal Water District are close to National Park areas. Malibu Lake and much of the land surrounding it to the south is parklands. Effluent discharges from Tapia ultimately end up in Malibu Creek, as does runoff. Past system failures have affected water quality at Malibu Lake.

Increases in development translate into increases in impervious surfaces which leads to greater amounts of runoff. Storm drains and channelization of streams lead to increases in peak discharge volumes and stream velocities which cause increased erosion and flooding. In addition to siltation impacts on water quality, runoff picks up "non-point" sources of pollution, including pesticides, fertilizers and oil and lead from automobiles.

There are two types of impacts related to flooding: impacts from flooding itself which are heightened by increased development and impacts from flood control measures. Development increases runoff as a result of increases in impervious surfaces and vegetation removal.

Development in Agoura Hills would increase impervious surfaces by 744 acres within the City. This change in impervious surfaces represents a 113 percent increase over existing impervious surfaces. Table 8 shows Agoura Hills' land uses and impervious surfaces created by them.

The additional runoff created by increases in impervious surfaces can cause serious erosion problems, sedimentation, habitat destruction, stream course alteration, property damage and possible loss of life. Steep hillsides, which are already susceptible to erosional processes, are an increased flood hazard when development occurs on them because the development impacts of runoff, siltation, etc. and the increased fire potential of hillside development (for a further discussion on fire see p. 77) cause greater deposits of debris. Excess debris will increase the volume and velocity of stream flows so that floods will be more severe than if the watershed had not been disturbed.

Impacts from flood control measures are primarily the result of stream channelization. In addition to being very expensive to construct, concrete channels significantly alter the stream environment through the destruction of riparian plants and animals. Recreational benefits of streams are also lost through channelization.



Table 8

## IMPERVIOUS SURFACES

Land Use	--Proposed Use--			--Existing Use--			--Change--		
	Acres	Coverage % acres		Acres	Coverage % acres		Acres	Coverage % Acres	
Resid-Rural (.05-.2/ac)	191.0	0.02	3.8	0.0	0.02	0.0	191	.0	4
Resid-Very Low (.2-1/ac)	287.0	0.09	25.8	56.0	0.09	5.0	231	0.1	21
Resid-Low (1-2/ac)	205.0	0.22	45.1	0.0	0.22	0.0	205	0.2	45
Resid-Single (2-6/ac)	1455.0	0.37	538.4	1077.0	0.37	398.5	378	0.4	140
Resid-Medium (6-15/ac)	127.0	0.60	76.2	82.0	0.60	49.2	45	0.6	27
Resid-High (15-35/ac)	36.0	0.80	28.8	3.0	0.80	2.4	33	0.8	26
Resid-Cluster (10-35/ac)	42.0	0.60	25.2	0.0	0.60	0.0	42	0.6	25
Open Space (0-.2/ac)	<u>1533.0</u>	0.02	<u>30.7</u>	<u>3271.0</u>	0.02	<u>65.4</u>	<u>-1738</u>	.0	<u>-35</u>
Residential	3876.0		774.0	4489.0		520.6	-613		253
Shopping Center	32.0	0.90	28.8	32.0	0.90	28.8	0	0.9	0
Retail/Service	223.0	0.90	200.7	119.0	0.90	107.1	104	0.9	94
Hotel/Motel/Tourist	20.0	0.85	17.0	0.0	0.85	0.0	20	0.9	17
Business Park	138.0	0.90	124.2	42.0	0.90	37.8	96	0.9	86
Business Park-Ofc/Retl	180.0	0.90	162.0	0.0	0.90	0.0	180	0.9	162
Mixed Coml/Residential	89.0	0.80	71.2	0.0	0.80	0.0	89	0.8	71
School	73.0	0.40	29.2	73.0	0.40	29.2	0	0.4	0
Local Park	78.0	0.10	7.8	26.0	0.10	2.6	52	0.1	5
Regional Park/Recreation	0.0		0.0	0.0		0.0	0	0.0	0
Transportation	223.0	0.80	178.4	149.0	0.80	119.2	74	0.8	59
Commercial Recreation	25.0	0.10	2.5	25.0	0.10	2.5	0	0.1	0
Open Water	<u>13.0</u>		<u>0.0</u>	<u>15.0</u>		<u>0.0</u>	<u>-2</u>	0.0	<u>0</u>
TOTAL NONRESIDENTIAL	1094.0		821.8	481.0		327.2	613		494
	4970.0		1595.8	4970.0		847.8	0		747



Mitigation  
Measures

Limitations on total development as well as densities will mitigate water quality impacts caused by runoff, erosion debris flow and septic tanks into area watercourses. The most effective form of flood mitigation is reducing the effects of flooding by keeping people away from the flood water. This approach is less expensive and more effective than the common structural approaches to controlling flooding. The construction of channels and debris basins is not even an option in the Agoura Hills area. The Malibu-Santa Monica Mountains Land Use Sensitivity Plan of the Flood Control District concludes that such a system is not economically justifiable, most canyon bottom flood plains are too narrow to justify construction, there is an interest in preserving the natural character of the area and the system would probably not be acceptable from an environmental standpoint because of its effects on riparian habitat.

Development should be based on land capabilities for runoff and erosion. About two-thirds of the Las Virgenes drainage basin and the Medea Creek drainage basin are considered to be either "reasonably or most suitable for development" based on hydrological considerations. Most of the Triunfo Canyon drainage basin is considered to be either marginally or least suitable for development (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-23). The floodway ordinance for watercourses in the City should be adopted, and the recently-adopted Hillside Development Ordinance of the City of Agoura Hills will strengthen erosion and runoff control. The floodways can be used for open space areas in the City and as part of a wildlife corridor network (see Section 3.4 for discussion of wildlife corridors).

There are other mitigation measures to minimize the impacts of flooding. Some of the habitat preservation measures can help to decrease the potential for flooding as grading and building is reduced, thereby limiting increases in impervious surfaces. Illegal grading has occurred in the mountains. Stronger monitoring of grading and the adoption of an environmental grading ordinance that is sensitive to vegetation and natural contours will help to minimize the impacts of flooding. Another measure to control erosion and runoff is the replanting of native vegetation, especially on slopes, after development has occurred. These plants should be both fire retardant and drought resistant to ensure that the plants will survive long, hot summers and their potential fires.





### 3.4 Biota

#### Environmental Setting

Since most of the study area has not been developed, it contains valuable habitat for many plant and animal species. Large mammals, including mountain lions and mule deer, are able to cross from the Simi Hills through the study area down to the Santa Monica Mountains National Recreation Area. This link that Agoura provides is vital to the continuation of some species as they require large hunting territories.

The study area also contains two areas with biological resources which have been deemed "significant" by the L. A. County Board of Supervisors. These areas, called Significant Ecological Areas (SEAs), are the Palo Comado SEA and the Las Virgenes SEA. These areas, as well as other areas within the study area, contain two especially noteworthy resources: oak trees and birds of prey.

There are twenty-two raptor species that nest and/or forage in the study area. Many of these raptors are considered "sensitive" by State and Federal wildlife agencies. Aside from aesthetic benefits, these birds are important in controlling rodent populations.

The Agoura area is noted for its large supply of oak trees. These trees, many of which are several hundred years old, provide important nesting sites for raptors. Currently, the supply of oak trees is decreasing for two reasons. Some trees are being lost to development while others are not regenerating to continue the species.

#### Habitat Types

Chaparral, which is probably the most characteristic vegetative type of Southern California, lives on steep slopes with shallow soils. It comprises 16% of the vegetation in Agoura Hills. This community usually occurs above the coastal sage scrub zone. The stiff, woody evergreen shrubs usually grow 3-6 feet high. It is extremely drought-resistant which makes it well-adapted to Southern California's long, dry summers. Chaparral is dense and often impenetrable which is important in stabilizing steep slopes and decreasing erosion. Chaparral provides cover for large animals, serves as a major component in the diet of the mule deer and produces seeds for birds and small mammals. About 900 vascular plant species occur in the chaparral community--240 are woody plants, mostly shrubs; over 300 are annual and biennial herbs; and about the same amount are perennial herb species.

Chaparral burns quickly and ignites easily. Fires occur in chaparral once every 10-40 years (Draft Natural Resource Management Plan, Environmental Assessment,



p. 55). (For a further discussion of fire, see Section 3.9, Risk of Upset). Fire, however, plays an important role in chaparral ecology. Most species in this community are fire-conditioned, with some plants germinating only if burned after the seeds have been dormant for years. These plant species have a built-in mechanism which informs the seeds that a fire has occurred. These plant species are found only after fire has swept through chaparral, including Whispering Bells (Emmenanthe penduliflora) and a native snapdragon (Anthirrhinum cornutum) (An Introduction to California Plant Life, p. 95).

Chaparral itself has an ecological adaptation to help it regenerate quickly after burning. This is called "crown-sprouting," which means that although the above-ground portion of chaparral scrub may be destroyed by brush fire, numerous new shoots grow from a large burl at or below the soil surface that terminates the root system. This trait allows crown-sprouting chaparral scrubs to reestablish immediately after a fire rather than going through successional reestablishment via seedlings.

Older chaparral communities (greater than 20 years) have a great deal of dead material because of chaparral's low rate of decomposition. Fire is the major decomposing agent. Because of general fire prevention efforts in chaparral areas, this vegetation frequently builds up very high fuel levels so that when a fire finally does occur, it is extremely intense. A large number of animal species are dependent upon chaparral and require adjacent expanses of chaparral for existence after a fire passes through a particular area. (A list of species typically found in chaparral, as well as in the other vegetative communities, is given in Table 11).

#### Coastal Sage Scrub

Along with chaparral, this is the most widespread vegetative community in the Santa Monica Mountains area, occurring in 20% of the City of Agoura Hills. It is referred to as "soft chaparral" due to the flexibility of the leaves and stems (Draft Natural Resource Management Plan, Environmental Assessment, p. 52). It is deciduous during the summer and fall so that it appears to be dormant during these seasons. Within the study area, the coastal sage scrub community is usually found below 1000 feet where it is present as a band surrounding higher mountains and extending into these mountains in the larger canyons. Three distinct phases of this community occur: namely the Inland Phase, the Sea-Bluff Succulent Phase, and one Maritime Phase. The Inland Phase is by far the most abundant and is the community which occurs in the Agoura Hills study area.



It is well-adapted to dry, rocky slopes and is also found in well-drained clay or gravelly areas. These soil conditions are low in fertility and subject to rapid erosion which makes coastal sage scrub important in slope stabilization. Community plant species quickly invade disturbed soil sites.

Fire is also important in the ecology of this vegetative community. After a fire, Coastal Sage Scrub usually recovers within a few years through a series of transitional stages, each with characteristic species.

Grasslands are characterized by low annual herbs such as black mustard, wild oats and brome grass. The extent of grasslands communities is shown on Table 9 and occurs in 19% of the City. This vegetative community is located on slopes and valleys with heavy, fine-textured soils. Grassland communities in California were originally dominated by native perennial brome grasses. During Spanish settlement in California, the grasslands were converted to a non-native annual vegetation as a result of overgrazing and the introduction of weedy European grasses and herbs (City of Westlake Village Draft General Plan and Integrated EIR, p. III-9).

Grasslands have high primary biological productivity, providing forage for herbivores, primary habitat for small mammals and abundant small animal populations such as rabbits, ground squirrels, and gophers. These small mammal populations furnish primary food source for raptors and mammals such as the gray fox, coyotes, bobcats and long-tailed weasels.

Grasslands are subject to many man-made constraints including the introduction of non-native species, agricultural conversion and urbanization. This community is scarce in Southern California.

Riparian Woodland communities occur in canyons and valleys with loamy or gravelly soils at low elevations throughout Southern California and comprise less than 1% of Agoura Hills. This community is clustered along stream courses where there is moisture at or near the surface year-round. The width of a riparian community depends upon the width of the watercourse it lines -- from wide river valleys to narrow strips along watercourses at high elevations of relatively steep streambanks.

Riparian woodlands are often the only source of water for wildlife during the summer months in the Santa Monica Mountains area. Riparian communities have a high bioproductivity. The canopy furnishes habitat for birds, small mammals and insects; the sub-canopy provides forage for small birds and protective cover for





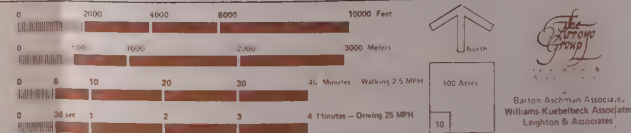




- Habitat Types**
- Coastal Sage Scrub
  - Mixed Chaparral
  - Woodland
  - Valley Oak Savannah
  - Coastal Live Oak
  - Riparian Woodland
  - Grass Lands
  - Barren Ground
  - Developed
  - Rock Outcropping
  - Open Water
  - Cultivated

**FIGURE 7.**  
**VEGETATIVE HABITATS**

**AGOURA HILLS**  
**GENERAL PLAN EIR**





larger mammals. The ground cover provides forage for a wide range of wildlife species (aquatic life forms, insects, reptiles, amphibians and mammals).

These communities are fragile and their range is being greatly reduced; they are becoming extremely uncommon in Southern California. The California Riparian Ecosystem Conference in 1981 estimated that less than 10% of the original 20,000 acres of riparian communities remain in California (Draft Natural Resource Management Plan, Environmental Assessment, p. 60). This richest habitat type is being lost to increased development which brings flood control and irrigation projects. Once channelized, the riparian community is gone to wildlife. Most of the remaining riparian woodlands are now confined to remote and inaccessible areas. While there are several riparian areas in the study area along Medea Creek and in Triunfo and Malibu Canyons, there is very little of this vegetative habitat within the City (see Habitat Map, p. 43).

#### Oak Woodland

Oak woodlands occur in canyon bottoms and north-facing hillsides. When this habitat occurs in lower interior valleys, it is known as valley oak woodlands, usually forming a savannah. (Less than 1% of Agoura Hills contains oak woodlands.) The California walnut community is a type of oak woodland. This subcommunity has a narrow distribution and is found only in coastal Southern California.

Oak woodlands and savannahs often occur in areas where the topography is suitable for development. Development often occurs, leading to a decline of this community. Oak woodlands are important to raptors. They provide roosting and nesting sites, which are needed by the birds of prey in conjunction with grasslands for hunting purposes. The value of raptors and the dominant oak woodland species of valley oak and coast live oak will be discussed in a separate section.



TABLE 9  
AGOURA HILLS HABITAT TYPES

<u>Type</u>	<u>Acres</u>	<u>Percent</u>
Coastal Sage Scrub	998	20%
Mixed Chaparral	773	16%
Woodland	135	3%
Valley Oak Savannah	8	*
Coast Live Oak	8	*
Riparian Woodland	9	*
Grasslands	925	19%
Barren Ground	0	0
Developed	2,047	42%
Rock Outcropping	0	0
Open Water	14	*
Cultivated	<u>0</u>	<u>0</u>
	4,918	100%

Source: The Arroyo Group

\* = less than one percent





Habitat Value      The mixture of habitats in the Agoura Hills study area support a broad range of wildlife. Four basic elements must be present in key wildlife habitats:

1. Breathing room: undisturbed areas where animals feed and separate themselves from other animals.
2. Basic food source: at its most basic level, certain plant communities.
3. Key land features: rock outcroppings for nesting sites, open areas for feeding, year-round streams, etc.
4. Flexibility: the ability to move to other areas to deal with the often rapid and harsh changes in the ecosystem of the Santa Monica Mountains. (Santa Monica Mountains Comprehensive Plan, p. 18)

The availability of these basic elements in each vegetative community can form the basis for their valuation. A matrix showing the relative importance of various habitat types is presented below:

TABLE 10  
WILDLIFE HABITAT VALUE

Vegetation Type	<u>Comparative Amount of Available Resource<sup>1</sup></u>			
	Food	Water	Shelter	<sup>2</sup> Space
Chaparral	3	1	4	0
Coastal Sage Scrub	2	1	3	2
Grassland	4	1	1	2
Riparian	4	5	5	4
Oak Woodland	4	5	5	4

1 Values available range from 0 (none or low) to 5 (high or critical).

2. Defined as the amount of this habitat regionally available, where 0 is extensive and 5 is restricted.

Source: FEIR, Wildwood Specific Plan No. 1, Amendment No. 5, Thousand Oaks, n.d.



TABLE 11\*  
COMMON VEGETATION AND WILDLIFE

<u>Plants</u>	<u>Vegetative Habitat**</u>
Chamisa ( <u>Adenostoma fasciculatum</u> )	C
Manzanitas ( <u>Arctostaphylos</u> )	C
California lilacs ( <u>Ceanothus</u> )	C
Oaks ( <u>Quercus</u> )	C
Buckthorns ( <u>Rhamnus</u> )	S,C
Sumacs ( <u>Rhus</u> )	O,S,C
Mountain-Mahogany ( <u>Cercocarpus betuloides</u> )	C
Tree Poppy ( <u>Dendromecon rigida</u> )	C
Toyon ( <u>Heteromeles arbutifolia</u> )	O,C
Hollyleaf Cherry ( <u>Prunus ilicifolia</u> )	C
Our Lord's Candle ( <u>Yucca whipplei</u> )	S,C
Red-shanks ( <u>Adenostoma sparsifolium</u> )	C
Oats ( <u>Avena</u> )	G
Bromes ( <u>Bromus</u> )	G
Fescues ( <u>Festuca</u> )	G
Barley ( <u>Hordeum</u> )	G
Fiddlenecks ( <u>Amsinckia</u> )	G
<u>Coreopsis</u>	G
Shooting Stars ( <u>Dodecatheon</u> )	G
Storks bills ( <u>Erodium</u> )	G
Poppies ( <u>Eschscholzia</u> )	S,G
Lupines ( <u>Lupinus</u> )	G
Goldenfields ( <u>Lasthenia</u> )	G
<u>Malacothrix</u>	G

\* Information contained on the following pages was extracted from Friesen, Richard Dean, Significant Ecological Areas of the Santa Monica Mountains Report, prepared for the Los Angeles County Department of Regional Planning, August 1982.

\*\* Vegetative Habitat

C = chaparral

S = coastal sage scrub

G = grasslands

R = riparian woodland

O = oak woodland



<u>Plants, cont.</u>	<u>Vegetative Habitat</u>
Owl's-Clovers ( <u>Orthocarpus</u> )	G
<u>Phacelia</u>	G
Popcorn Flowers ( <u>Plagiobothrys</u> )	S,G
Sages ( <u>Salvia</u> )	G
Clovers ( <u>Trifolium</u> )	G
Violets ( <u>Viola</u> )	S
California Sagebrush ( <u>Artemesia californica</u> )	S
California Wild Buckwheat ( <u>Eriogonum fasciculatum</u> )	S
Bird's Foot Trefoil ( <u>Lotus scoparius</u> )	S
Valley Cholla ( <u>Opuntia parryi</u> )	S
Maritime Cholla ( <u>Opuntia littoralis</u> )	S
Purple Nightshade ( <u>Solanum xanti</u> )	S
Golden Yarrow ( <u>Eriophyllum confertiflorum</u> )	S
Monkey-Flowers ( <u>Diplacus</u> and <u>Mimimulus</u> )	S
<u>Malacothamnus</u>	S
Poison-Oak ( <u>Toxicodendron diversilobum</u> )	O,S
Calabazilla ( <u>Cucurbita foetidissima</u> )	S
Scale-Broom ( <u>Lepidospartum squamatum</u> )	S
Bigleaf Maple ( <u>Acer macrophyllum</u> )	R
Western Sycamore ( <u>Platanus racemosa</u> )	R
White Alder ( <u>Alnus rhombifolia</u> )	R
Coast Live Oak ( <u>Quercus agrifolia</u> )	O,R
Fremont Cottonwood ( <u>Populus fremontii</u> )	R
Willows ( <u>Salix</u> )	R
Blue Elderberry ( <u>Sambucus mexicana</u> )	R
Coyote Brush ( <u>Baccharis pilularis</u> )	R
Greenbark Ceanothus ( <u>Ceanothus spinosus</u> )	R
Giant Chain Fern ( <u>Woodwardia fimbriata</u> )	R
California Walnut ( <u>Juglans californica</u> )	O
California-Lilacs ( <u>Ceanothus</u> )	O
Currents ( <u>Ribes</u> )	O
Blue Elderberry ( <u>Sambucus mexicana</u> )	O





## Insects

Snakeflies ( <u>Agulla</u> )	C
Rain Beetles ( <u>Pleocoma</u> )	C
Ceanothus Silk Moth ( <u>Hyalophora euryalus</u> )	C
Gray Hairstreak ( <u>Strymon adenostomatis</u> )	C
Arota Copper ( <u>Lycaena arota nubila</u> )	C
Hedgerow Hairstreak ( <u>Strymon saepium</u> )	C
Callippe Fritillary ( <u>Speyeria callippe</u> )	C
California Timema ( <u>Timema californicas</u> )	C
Camel Cricket ( <u>Gammarotettix genitalis</u> )	C
Painted Arachnis Moth ( <u>Arachnis picta</u> )	G
Bumblebee ( <u>Bombus</u> spp.)	G
Western Bush Cricket ( <u>Hoplosphyrum boreale</u> )	G
Western Short-horned Walkingstick ( <u>Parabacillus hesperus</u> )	G
Trapdoor Spider ( <u>Bothriocyrtum californicum</u> )	G
Minor Ground Mantid ( <u>Litaneutria minor</u> )	S
California Mantid ( <u>Stagmomantis californica</u> )	S
Pink Glowworm ( <u>Microphotus angustus</u> )	S
Snakeflies ( <u>Agulla</u> )	S
Rain Beetles ( <u>Pleocoma</u> )	S
Tarantula Hawk ( <u>Pepsis mildei</u> )	S
Carpenter Bee ( <u>Xylocopa californica</u> )	S
Rose-winged Grasshopper ( <u>Dissoteira pictipennis</u> )	S
Jerusalem Cricket ( <u>Stenopelmatus fuscus</u> )	S
Ringlet ( <u>Coenonympha tullia</u> )	S
Common Checkerspot ( <u>Euphydryas chalcedona</u> )	S
Bramble Hairstreak ( <u>Callophrys dumetorum</u> )	S
Leanira Checkerspot ( <u>Melitaea laenira</u> )	S
Mormon Metalmark ( <u>Apodemia mormo</u> )	S
Underwing Moths ( <u>Catocala</u> spp.)	R
Sylvan Hairstreak ( <u>Strymon sylvinus</u> )	R
Satyr Angelwing ( <u>Polygonia satyrus</u> )	R
Western Tiger Swallowtail ( <u>Papilio rutulus</u> )	R
Lorquin's Admiral ( <u>Limenitis lorquini</u> )	R
Edward's Glassy Wing ( <u>Hemihyalea edwardsi</u> )	R
Western Popular Sphinx ( <u>Pachysphinx occidentalis</u> )	R



<u>Insects, cont.</u>	<u>Vegetative Habitat</u>
Velvety Tree Ant ( <u>Dasymutilla</u> sp.)	R
Ironclad Beetle ( <u>Phloedes pustulosus</u> )	0
California Sister ( <u>Adelpha bredowi</u> )	0
Ringlet ( <u>Coenonympha tullia</u> )	0
Callippe Silverspot ( <u>Speyeria callippe</u> )	0
Western Treehole Mosquito ( <u>Aedes sierrensis</u> )	0
Sylvan Satyr ( <u>Cercyonis silvestris</u> )	0
California Hairstreak ( <u>Strymon californica</u> )	0
Snowy Tree Cricket ( <u>Oecanthus niveus</u> )	0
California Oak Moth ( <u>Phryganidia californica</u> )	0
Brown Ctenucha ( <u>Ctenucha brunnae</u> )	0
California Timema ( <u>Timema californica</u> )	0
Winter Sphinx ( <u>Arctonotus lucidus</u> )	0
Elegant Sphinx ( <u>Sphnix perelegans</u> )	0
 <u>Reptiles</u>	
Western Fence Lizard ( <u>Sceloporus occidentalis</u> )	O,R,S,C
Southern Alligator Lizard ( <u>Gerrhonotus multicarinatus</u> )	O,S,C
Common Kingsnake ( <u>Lampropeltis getulus</u> )	G,O,R,S,C
Striped Whipsnake ( <u>Masticophis lateralis</u> )	O,R,S,C
Western Rattlesnake ( <u>Crotalus viridis</u> )	G,R,S,O,C
Side-blotched Lizard ( <u>Uta stansburiana</u> )	S,G
Coast Horned Lizard ( <u>Phrynosoma coronatum</u> )	S,O,G
Gopher Snake ( <u>Pituophis melanoleucus</u> )	S,C,O,R,G
California Legless Lizard ( <u>Anniella pulchra</u> )	S
Western Skink ( <u>Eumeces skiltonianus</u> )	R
Two-striped Garter Snake ( <u>Thamnophis couchi</u> )	R
California Mountain Kingsnake ( <u>Lampropeltis zonata</u> )	R
Ring-necked Snake ( <u>Diadophis punctatus</u> )	O,R
Pacific Pond Turtle ( <u>Clemmys marmorata</u> )	R



<u>Amphibians</u>	<u>Vegetative Habitat</u>
California Newt ( <u>Taricha torosa</u> )	R
Eschscholtz's Salamander ( <u>Ensatina eschscholtzi</u> )	R
California Slender Salamander ( <u>Batrachoseps attenuatus</u> )	R
Western Toad ( <u>Bufo boreas</u> )	R
Pacific Treefrog ( <u>Hyla regilla</u> )	R
Arboreal Salamander ( <u>Aneides lugubris</u> )	O
Eschscholtz's Salamander ( <u>Ensatina eschscholtzi</u> )	O
Garden Slender Salamander ( <u>Batrachoseps major</u> )	S,O
Western Toad ( <u>Bufo boreas</u> )	S,C,O

<u>Birds</u>	
California Thrasher ( <u>Toxostoma redivivum</u> )	C
Rufous-sided Towhee ( <u>Pipilo erythrophthalmus</u> )	C
Wrentit ( <u>Chamaea fasciata</u> )	C
Mountain Quail ( <u>Oreortyx pictus</u> )	C
Western Meadowlark ( <u>Sturnella neglecta</u> )	G
Sage Sparrow ( <u>Amphispiza belli</u> )	S
Song Sparrow ( <u>Melospiza melodia</u> )	S
Bewick's Wren ( <u>Thryomanes bewickii</u> )	S
Cooper Hawk ( <u>Accipiter cooperii</u> )	R
Red-shouldered Hawk ( <u>Buteo lineatus</u> )	R
Acorn Woodpecker ( <u>Melanerpes formicivorus</u> )	O
Plain Titmouse ( <u>Parus inornatus</u> )	O
Band-tailed Pigeon ( <u>Columba fasciata</u> )	O
Screech Owl ( <u>Otus asio</u> )	O
Lawrence's Goldfinch ( <u>Spinus lawrencei</u> )	O

<u>Mammals</u>	<u>Vegetative Habitat</u>
Deer Mouse ( <u>Peromyscus maniculatus</u> )	S,G,C
Cactus Mouse ( <u>Peromyscus eremicus</u> )	C
Brush Mouse ( <u>Peromyscus boyleyi</u> )	O,C
Desert Woodrat ( <u>Neotoma lepida</u> )	S,C
California Pocket Mouse ( <u>Pergonathus californicus</u> )	S,C
Pacific Kangaroo Rat ( <u>Dipodomys agilis</u> )	S,G,C





<u>Mammals, cont.</u>	<u>Vegetative Habitat</u>
Brush Rabbit ( <u>Sylvilagus bachmani</u> )	C
California Ground Squirrel ( <u>Citellus beecheyi</u> )	C
Gray Fox ( <u>Urocyon cinereoargenteus</u> )	C
Bobcat ( <u>Lynx rufus</u> )	O,C
Coyote ( <u>Canis latrans</u> )	S,C
Spotted Skunk ( <u>Spilogale putorius</u> )	C
Badger ( <u>Taxidea taxus</u> )	C
Mountain Lion ( <u>Felis concolor</u> )	C
Ringtail ( <u>Bassariscus astutus</u> )	C
Raccoon ( <u>Procyon lotor</u> )	O,R,C
Mule Deer ( <u>Odocoileus hemionus</u> )	C
Pocket Gopher ( <u>Thomomys bottae</u> )	G
Western Harvest Mouse ( <u>Reithrodontomys megalotis</u> )	R,S,G
California Vole ( <u>Microtus californicus</u> )	R,S
Audubon Cottontail ( <u>Sylvilagus audubonii</u> )	S
Broad-footed Mole ( <u>Scapanus latimanus</u> )	R
Ornate Shrew ( <u>Sorex ornatus</u> )	R
White-footed Mice ( <u>Peromyscus</u> spp.)	R
Long-tailed Weasel ( <u>Mustela frenata</u> )	R
Striped Skunk ( <u>Mephitis mephitis</u> )	R
Western Gray Squirrel ( <u>Sciurus griseus</u> )	O
Beechey Ground Squirrel ( <u>Citellus beecheyi</u> )	O
bat species ( <u>Myotis</u> , <u>Lasiurus</u> , <u>Eumops</u> , <u>Chiroptera</u> )	R,S,C,O



Rare,  
Endangered,  
Threatened and  
Unique Species

The California Department of Fish and Game inventories species that are Federally or State listed endangered, rare and threatened animals and plants. Additionally, the California Natural Diversity Data Base includes those plants and animals considered by the scientific community to be deserving of such listing. The following is a list of those species that may be in the study area according to the Data Base:

1. Coopers Hawk (Accipiter cooperii)
2. Red-shouldered Hawk (Buteo Lineatus elegans)
3. San Diego Horned Lizard (Phrynosoma Coronatum blainillei)
4. Many Stemmed Dudleya (Dudleya Multicaulis)
5. Conejo Dudleya (Dudleya parva)
6. Conejo Buckwheat (Eriogonum crocatum)
7. Santa Susana Tarweed (Hemizonia minthornii)

The Natural Diversity Data Base may not include all special animals and plants that can be found in the study area because not all species occurrence data are currently entered into the Data Base inventory.

A biological resources report, detailing sensitive wildlife species, was completed as part of the Oak Park Community Plan (EIR Supplement, Oak Park Community Plan, Appendix 9.9, Biological Resources Report, p. 146 and 147). This report lists several species of regional concern. These species may also be located in the study area:

1. Turkey Vulture (Cathartes aura)
2. Red-tailed Hawk (Buteo jamaicensis)
3. Golden Eagle (Aquila chrysaetos)
4. Northern Harrier (Circus cyaneus)
5. Prairie Falcon (Falco mexicanus)
6. Grasshopper Sparrow (Ammodramus savannarum)
7. Coastal (California) Black-tailed Gnatcatcher (Polioptila melanura californica)
8. Mountain Lion (Felis concolor)



Significant  
Ecological Areas  
(SEA)

The California State Legislature requires that all General Plans prepared by cities and counties contain an open space element. The Legislature defined open space as "areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scenic purposes, rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands." In the early 1970's, Los Angeles County began to identify areas within the County for designation as Significant Ecological Areas (SEAs). In 1980, the Los Angeles County Board of Supervisors designated 62 areas as SEAs mostly in response to a 1976 study of SEAs.

This study established a set of criteria to be used in determining whether or not an area should be deemed ecologically sensitive. These criteria, in order of decreasing importance, are:

1. The habitat of rare, endangered, and threatened plant and animal species;
  2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis;
  3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution in Los Angeles County;
  4. Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability;
  5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community;
  6. Areas important as game-species habitat or as fisheries; and
  7. Areas that would provide for the preservation of relatively undisturbed examples of the natural biotic communities in Los Angeles County.
- (Significant Ecological Areas of the Santa Monica Mountains, p. 3)





Two SEAs were designated by the L. A. County Board of Supervisors in the Agoura area. These are the Palo Comado SEA and the Las Virgenes SEA. The Palo Comado SEA is the larger of the two, with 2760 acres. The Las Virgenes SEA is much smaller, with only 434 acres. These acreage estimates were made by the Los Angeles County Department of Regional Planning and include buffer areas, which serve to protect the resources of the SEAs from encroachment by development. Most of the land within the SEA is in private ownership. (See habitat map, p. 43, for location of the SEAs.)

The Las Virgenes SEA contains coastal sage, chaparral, woodland and grassland vegetative communities. Several unusual flora populations for the Santa Monica Mountain area exist in this SEA, including a stand of California Junipers (Juniperus californicus) which has persisted in the SEA for at least 200 years. Also present are many Valley Oaks (Quercus lobata) and Live-forever (Dudleya cymosa) which is surviving in extreme physical conditions compared to other populations which usually grow in cool, shaded canyon bottoms.

Most of this area has been relatively undisturbed. Several small residential developments are under construction within the northern boundary of the SEA, adjacent to the significant ecological resources. Off-road vehicles utilize a fire break that was cleared along the central backbone ridge within the SEA which has caused some erosion. Other areas of the SEA are, in general, relatively undisturbed.

The Palo Comado SEA contains an extensive grassland community, large areas of oak woodland, patches of riparian communities and a large orchard area. There are no State or Federally listed rare, endangered, or threatened animal or plant species in the Palo Comado SEA. There are, however, several communities which are uncommon within California, including walnut communities and valley oak savanna. The importance of the oaks is increased because a large concentration of raptorial birds regularly nest in these trees, both north and south of the Ventura Freeway. The raptors in the Agoura area will be discussed in greater detail in a following section.

#### Development in SEAs

In August of 1982, a report was done for SEAs in the Santa Monica Mountains. The Friesen report discusses uses of SEA land including the extent of development that should be allowed in the SEA:

1. Conservation of species, communities, and habitat diversity; and development of perspectives in studies of the biology of rare, endangered, and threatened species;



2. Ecological characterization of species, communities, and habitats; and development of perspectives in studies of biological community analysis and habitat significance;
3. Predictive system for occurrence and distribution of species, communities, and habitats (what is where and under what conditions) and interpretation of the origin, migration, and evolution of species, floras, faunas and biological communities.
4. Foundation for research in applied problems in many fields of endeavor such as hydrology, pedology, habitat cover, food productivity (i.e., streamtrout catch), community ecology, and others;
5. Assisting in decisions on land use, impact evaluation, and management problems of many types; and
6. Establishment of priorities through natural area basic inventory analysis for natural area acquisition and resource protection. (Significant Ecological Areas of the Santa Monica Mountains, p. 6-7)

SEAs do not have to be completely undisturbed just as long as the SEA retains or re-establishes its natural character and value which provide scientific, recreational or inspirational benefits (definition of the U. S. Department of the Interior, Heritage Conservation and Recreation Service). However, it is not known how much additional human intrusion can be tolerated by the resources within the SEAs. Cumulative development within the SEAs must also be considered.

Recommendations for SEA protection are given by Friesen:

1. In reviewing applications for potential development in SEAs the greatest protection should be extended to class 1 (habitat of rare, endangered, and threatened species) with decreasing priority through the classes to class 7 (relatively undisturbed examples of natural biotic communities).

(The resources of the Palo Comado SEA can be considered as Classes 2, 4 and 7. The Las Virgenes SEA resources are most appropriate as Class 5 (See pages 54 and 55 for class definitions).

2. Particular care should be taken in the SEAs, and areas adjacent to them, that drainage patterns and runoff rates are not significantly altered, which might affect changes in downstream riparian areas.



Mitigation such as catch ponds, open-weave paving, and sump pits should be considered in any developments upstream of SEA riparian areas.

3. The County ordinances dealing with SEAs should be periodically reviewed and updated. Consideration should be given to modification of the Ordinances to provide additional protection for the flora and special habitats within SEAs from clearance activities.

(L. A. County Ordinance No. 82-0003 was adopted on February 15, 1983, and sets forth regulations for development in SEAs including stipulating that existing wildlife movement corridors be left undisturbed and that the requested development retains sufficient natural vegetative cover and/or open space to buffer critical resource areas from the proposed development.)

4. Recognizing the practical difficulties of on-going monitoring of all SEAs, an effort should be mobilized to provide public information in a campaign to involve homeowners, homeowner's associations, and developers in recognizing and protecting the resources of the SEAs.
5. The role of the Significant Ecological Areas Technical Advisory Committee (SEATAC) is important and should be supported by the scientific communities. Furthermore, conservationists, individual homeowners and homeowner's associations, and developers should work closely with SEATAC and the Los Angeles County Department of Regional Planning to help assure balanced treatment of the environment.





Raptors The density of raptors in the Santa Monica Mountains area is one of the highest in the United States. There are twenty-one species of raptors that utilize the area and sixteen that nest within it. An area comparable to the Santa Monica Mountains has been congressionally-recognized as unique for its variety and concentration of raptors. In the Birds of Prey National Conservation Area in Idaho, twenty-two species of raptors utilize the area and fourteen species nest within it.

Over a period of three to four years, the National Park Service has identified raptor nesting sites in the Agoura Hills' area. Most of these sites occur in the Palo Comado Significant Ecological Area. The following nest sites have been discovered:

TABLE 12  
RAPTOR NESTING SITES

<u>Raptor</u>	<u># of Nesting Sites</u>
Coopers Hawk ( <u>Accipiter cooperii</u> )	7
American Kestrel ( <u>Falco sparverius</u> )	5
Red-tailed Hawk ( <u>Buteo jamaicensis</u> )	16
Spotted Owl ( <u>Strix occidentalis</u> )	1
Golden Eagle ( <u>Aquila chysaetos</u> )	2
Great Horned Owl ( <u>Bubo virginianus</u> )	2
White-tailed Kite ( <u>Elanus leucurus</u> )	2
Red-shouldered Hawk ( <u>Buteo lineatus</u> )	2
Barn Owl ( <u>Tyto alba</u> )	2
Long-eared Owl ( <u>Asio otus</u> )	1
Prairie Falcon ( <u>Falco mexicanus</u> )	<u>1</u>
TOTAL	41

Because of the large foraging requirements of raptors, the following species probably also utilize the study area:

- Raptor
1. Sharp-shinned Hawk (Accipiter striatus)
  2. Osprey (Pandion haliaetus)
  3. Turkey Vulture (Cathartes aura)
  4. Northern Harrier (Circus cyaneus)



5. Screech Owl (Otus asio)
6. Raven (Corvus corax) (included because it is ecologically a raptor and its nests are used by raptors).

All of the above raptors are fully protected species by California. Only two of them, however, have a legally "fully protected" status under Section 3511 of the State Fish and Game Code. These are the Golden Eagle and the White-tailed Kite. This status means that the raptors cannot be "taken or possessed at any time." This includes capturing for falconry purposes as well as mounting the birds. A special permit is needed for scientific research of these raptors. The Golden Eagle is also protected under the Federal Bald Eagle Act.

The California Fish and Game has a "special concern list" which includes several of the raptors in the study area. This designation does not provide additional legal protection; it does, though, list birds that are showing a statewide decline. The raptors on this list include: Cooper's Hawk, Spotted Owl, Golden Eagle, Long-eared Owl, Prairie Falcon, Sharp-shinned Hawk, Osprey and Northern Harrier.

The Forest Service also has a "sensitive" species list. Again, this designation has no legal status. It is applied most often to species that are determined to need some kind of special management. Included on this list are: the Golden Eagle, Spotted Owl, Osprey, Turkey Vulture and Northern Harrier.

The tolerance of a species to man's intrusion is a major determinant of its special designation. Sensitivity is considered in terms of both a raptor's population status and in terms of its habitat requirements. However, even among an individual species, "tolerance" varies greatly. In general, Golden Eagles and Prairie Falcons are the most sensitive of the raptors in the study area. Cooper's Hawks, Red-tailed Hawks, Long-eared Owls, Sharp-shinned Hawks and Osprey are moderately sensitive with American Kestrels, White-tailed Kites and Screech Owls being among the least sensitive raptors in the study area.

Several vegetative habitats in Agoura Hills are important to raptors. Some habitats are necessary for foraging while others provide appropriate nesting sites. The oak woodland habitat provides nesting sites for raptors. Grasslands provide important foraging grounds, partially because prey is very vulnerable and many smaller rodents, especially mice, squirrels and gophers are abundant. To a somewhat lesser extent, coastal sage scrub provides a foraging source for raptors. Foraging is minimal in chaparral, however, because the plant growth is often so thick that it becomes impenetrable.



Each species has unique needs which are met by a specific combination of topographical, vegetational and micro-climatic features (Final Environmental Impact Report, Wildwood Specific Plan No. 1, Amendment No. 5, Appendix D). Habitat utilization for foraging by various species is shown below:

TABLE 13\*  
UTILIZATION OF HABITATS BY RAPTORS FOR FORAGING

	Grassland			Coastal Sage			Ecotone (grassland-coastal sage)		
	**L	M	H	L	M	H	L	M	H
Golden Eagle			X		X				X
Red-tailed Hawk			X		X				X
Northern Harrier			X		X				X
American Kestrel			X	X				X	
White-tailed Kite			X	X				X	
Cooper's Hawk		X			X				X
Sharp-shinner Hawk		X			X				X
Raven			X			X			X
Barn Owl			X		X				X

\* Source: Bloom, Peter H., "Raptor Assessment for Envicom Corporation Concerning Thousand Oaks - Wildwood West End Amendment EIR", Appendix D, January 29, 1979, in Final Environmental Impact Report, Wildwood Specific Plan No. 1, Amendment No. 5, City of Thousand Oaks Planning Department, n.d.

\*\*L - Low, M - Moderate, H - High.

Raptor nest failures are attributable to both direct and indirect human impacts. Construction activities, including noise generation, negatively impact nesting raptors. Although some species may return to their nests after construction has been completed, the impact of construction on young birds during brooding season and while the birds are fledglings can be severe. Raptors may abandon their young during construction, leaving the fledglings to freeze and/or starve.





There are also indirect impacts of human presence. A 1973 study of red-tailed and red-shouldered hawks in Orange County showed decreased reproductive success for nests located close to a major highway. Red-tailed hawk nests located within 1/4 mile of the highway had a failure rate five times as great as nests which were further from the highway. The failure rate for red-shouldered hawks within 1/4 miles of the highway was twice that of areas greater than 1/4 miles from the highway. (Final Environmental Impact Report, Wildwood Specific Plan No. 1, Amendment No. 5, Appendix D)

The cumulative effects of development on raptors may be substantial. Foraging area requirements are often large. For example, the Golden Eagle has a home range of about 25 miles. Development in Thousand Oaks and Westlake Village to the west of Agoura Hills has decreased foraging areas and nesting sites for raptors. As development increases in the community of Oak Park to the north of Agoura Hills, raptor habitat will correspondingly decrease. Further, this development often occurs in the most valuable raptor habitats. Grasslands and oak woodlands, vital to raptors, are also the most suitable development sites in the Agoura Hills area. The carrying capacity of the study area will eventually be exceeded, causing a decline in the raptor population and the eventual elimination of some species, particularly the large raptors.

Aside from the aesthetic benefits of raptors, they are important in controlling rodent populations, including gophers, ground squirrels and hares. Since raptors are at the top of the food chain, the health of their populations are indicative of the continued success of lower animal species in the area.

A decline in the number of raptors in the Agoura Hills area is inevitable with increased development. However, several measures can be implemented to help ensure species continuation in the Agoura area. First, development should be sensitive to proximity to raptors and restricted in areas with particularly high concentrations of nesting sites. Since most of the nesting sites are within the Palo Comado significant ecological area which already has special protection measures, this measure will not confine development to a great extent.

Second, if development is allowed to occur in areas close to raptor nesting sites, it should be limited or curtailed during certain times of the year. For some species, such as the Golden Eagle and the Great Horned Owl, egg laying begins in early January. For others, like the Red-shouldered Hawk, egg laying begins in



March. Brooding is a particularly critical time and disturbances to the nest can prevent eggs from successfully hatching. After June 1, the young birds have left the nest and development will cause far fewer problems. Since the timing of disturbance will vary between raptor species, specific plans for proposed projects should consider the type of raptors in the project area.

Finally, habitats and individual vegetative species of high value to raptors should be preserved. As was discussed, oak woodlands and grasslands are the most important vegetative habitats. Within these habitat types, valley oak, coast live oak and sycamores are particularly important to raptor populations. Eucalyptus, although an imported species, is also a valuable tree.



## Oak Trees

The two types of oak in the oak woodland community are the Evergreen Coast Live Oak (Quercus agrifolia) and the deciduous Valley Oak (Quercus lobata). The Coast Live Oak is denser and darker in appearance and is concentrated on north-facing slopes and ravines. The Valley Oak occurs with grassland vegetation and the trees are more spread out, forming a savanna. Both species have long life spans, ranging from 100 to 300 years.

The oaks support many levels of wildlife. According to a report on oak trees by Chambers, some part or another of an oak tree is known to be eaten by 186 different kinds of birds and mammals. (Evaluation of Effects of Land Development on Coastal Live Oaks and Valley Oaks) The trees are also used by animals for physical cover, nesting, foraging and thermal cover. The Valley Oak in particular provides an important habitat for nesting birds.

The continued presence of oak trees in the Agoura Hills area is currently threatened. Much of the area that supports the trees is being used for grazing purposes. New oak tree saplings are being eaten by cattle which is most likely the cause of the lack of species regeneration. Overgrazing has an additional detrimental impact on oak trees. Extended periods of grazing result in a loss of the natural water supply because the ground surface becomes impervious. In the short term, overgrazing may not be a threat to the continuation of the species in the Agoura area since the trees are long-lived. However, the lack of regeneration could pose significant long-term problems for the species.

Several development-related impacts are threatening species continuation. Site modification by land development may alter the area's water balance. Too much as well as too little water can kill oaks. A chronic water deficit, caused by root loss from development, can kill oaks. Developers have attempted to preserve oaks. However, the trees like deep, rich, dry, undisturbed soil around their trunks. They do not adapt to moist soil during summer months. In fact, summer watering is the major cause of death among local oaks.

Oaks can also be lost to development when increased siltation occurs. The trees need high soil oxygen around their root crowns. An oak can lose all of its leaves and much of its growth in a fire and resprout from its major branches. Within a few years' time it can almost fully recover. However, oaks have been killed with as little as six inches of fill over the root crown (Oak Park Community Plan, p. II-119).





Before attempts to control the loss of oak trees can be made, an inventory and map of individual trees should be undertaken. This survey should evaluate the value of individual trees in terms of size and health, as well as aesthetic considerations. Specific development plans, in particular, should consider the impacts of the proposed project on area oak trees.

The use of land with oak trees for grazing could be eliminated, thereby alleviating the regeneration problem. The land, however, is economically viable in this useage and an alternative use may be even more problematic for the oaks. Fences could be constructed around young saplings to prevent cattle from causing grazing problems. This method, however, could be quite costly.

The prevention of loss of oak trees to development can be partially corrected through the adoption of an ordinance that can restrict the cutting down of trees and require the planting of replacement trees as compensation for those lost to development. It is preferable to restrict the cutting down of oaks by project design; clustering development on the project site away from oaks is one alternative. Most ordinances for oak tree preservation have allowed the replacement of a 100-year-old tree with 15-gallon trees. Although in the long term this method will help to ensure species continuity, in the short term it will not. Habitat provided by mature oaks would be lost. Wildlife supported by oaks, especially nesting birds, would be crowded into smaller areas and wildlife populations would decline.



## Environmental Impacts

Besides the actual physical alteration of habitat areas, a number of development impacts can be expected as a result of increased human activity in addition to the individual impacts discussed regarding SEAs, raptors and oak trees. The impact of development in Agoura Hills and the remainder of the study area cannot be considered by itself. Development in Oak Park (to the north) and Westlake Village and Thousand Oaks (to the west) will also impact wildlife in the Agoura Hills area. These cumulative impacts must be considered.

Increases in human activity lead to increases in wildfires which, along with their associated wildfire suppression activities, destroys wildlife habitat and destabilizes slopes, leading to erosion and potential flooding. Development creates wildlife migratory interferences and decreases water quality. Off-road vehicle access destroys habitat and frightens wildlife. Human presence may also lead to illegal hunting and dumping and the introduction of domestic pets which are predators to some wildlife species. Increases in human activity also brings harassment to wildlife, including street lighting (which particularly impacts nocturnal species), plant collecting and nest disturbances.

## Mitigation Measures

The major mitigation measure to offset plant and animal impacts is the provision of open space within the City of Agoura Hills. The majority of this open space will emphasize the natural value of the Agoura area by controlling the amount and type of recreation allowed in open space areas. In most open space areas only passive recreation, such as trails, will be allowed. Intensive recreation will be allowed in those open space areas with the fewest ecosystem constraints. There are several measures that can help to control recreation and its associated impacts in designated open space areas, including: limiting trail access into these areas; restricting off-road vehicle access; preventing dumping; and prohibiting the discharge of firearms.

Open space areas should also include portions of the representative habitats of the Agoura Hills area, including chaparral, coastal sage scrub, grasslands, oak woodland and riparian communities. SEA designation is a means to protect habitat and to provide open space. The majority of the land within both the Palo Comado SEA and the Las Virgenes SEA should be designated as open space. Development allowed within Agoura Hills' SEAs should be constrained by individual as well as cumulative effects. If possible, development should be transferred outside the SEA boundaries. When development is allowed to occur within a SEA, it should be clustered away from the most significant elements to minimize the effects on wildlife and the loss of native vegetation. All development allowed within and in close



proximity to SEAs should be contingent upon the completion of an environmental assessment to ensure the continued preservation of their important resources.

There are several ways to minimize the impacts of development on this habitat, outside of SEAs, both in open space areas and in developed areas. In addition to the specific mitigation policies for oaks and raptors on pp. 60-61 and 63, the following mitigation measures can help to protect plant and animal resources.

The planting of natural vegetation that is both drought tolerant and fire resistant in development will reduce fire hazards, offset the loss of native plant species and encourage the return of some wildlife post construction.

Steps should be taken to prevent further channelization of the study area. Riparian areas are lost to wildlife once channelization has occurred. Channelization removes the percolation factor which leads to greater siltation. There should be setbacks of at least 100 feet along areas with this richest of all habitat. Chaparral and coastal sage scrub habitats shouldn't be altered where extensive damage of watersheds would result. Proper lighting of development can also decrease its impact on wildlife. This includes measures such as street lighting only at intersections, use of low intensity street lights and shielding of lighting. Finally, density restrictions can greatly lessen the impacts of development on plant and animal communities.

A combination of a large open space system with additional habitat preservation measures can help make Agoura Hills a "gateway" community, connecting open space to the Santa Monica Mountains National Recreation Area to the south and east, Oak Park to the north and Thousand Oaks to the west. A major element of this integrated open space plan is wildlife corridors.

#### Wildlife Corridors

One of the basic needs of wildlife is the ability to move from one area to another. This requirement for mobility is a function of both crowding and food and water availability. When the carrying capacity is exceeded, part of the population must move to another area to survive. Especially during the summer months, water and food sources shift and wildlife shifts with it. The mule deer population in the Santa Monica Mountains area provides a good example of this seasonal migration. From January to April, the mule deer feeds on green grasses and weeds growing on southwest-facing slopes and rolling hills. As summer progresses, this food supply begins to disappear and the mule deer shift their diet to one of various shrub species and their





location to northerly-facing slopes. Mountain lions feed exclusively on mule deer and so must be able to follow the population.

As development increases, migration is often restricted, isolating wildlife within undeveloped "islands." Besides habitat encroachment, development also brings additional forms of human intrusion including illegal shooting, offroad vehicles and pets.

The width and location of wildlife mobility corridors is a function of the type of landforms and availability of suitable cover; the intensity or type of land use proposed adjacent to the corridor; and the distance between open space parcels to be linked. Existing parks and Significant Ecological Areas with their associated buffers can serve as open space corridors for wildlife. Flood plains and key habitats, such as riparian woodlands and raptor nesting areas, are also important wildlife mobility corridors.

To minimize barriers to wildlife movement, culverts should be used under roadways and the Ventura Freeway to provide safe crosspoints. Signage at key wildlife crossing points should be provided to inform motorists of the wildlife corridor. Disruption from human activities can be reduced by vegetative buffers separating the corridors from residential and commercial land uses.

In developing wildlife corridors for Agoura Hills, it is important that the corridors are not disjoint but rather integrated into a continuous open space system with linkages to surrounding areas. This system will necessarily have more than one wildlife circulation path so animals will have more than one way in and out in case of fire or human disturbances. The Santa Monica Mountains National Recreation Area to the east and south of the City will be important sources of linkages for Agoura Hills' corridor system.

In addition to the Palo Comado and Las Virgenes Significant Ecological Areas, several other areas in Agoura Hills should provide major components of the corridor system.



### 3.5 Noise

#### Environmental Setting

Agoura Hills is exposed to noise levels from a number of transportation noise sources that result in noise levels that are generally considered unacceptable for new development. These include the Ventura Freeway and major arterials including Kanan Road, Thousand Oaks Boulevard, Agoura Road and Reyes Adobe Road.

#### Environmental Impact

The proposed general plan will result in development of residential areas which will be exposed to noise levels considered unacceptable for new development without sound insulation. General plan policies and the building code require that such residential structures be insulated sufficiently to provide acceptable interior noise levels. Noise levels considered acceptable for new development are outlined in the noise element as illustrated below.

TABLE 14  
NOISE GUIDELINES AND STANDARDS

	Noise Level, dB CNEL or Ldn	
	<u>Desirable Maximum</u>	<u>Maximum Acceptable</u>
Land Use		
Residential, Low Density	55	65
Residential, Medium Density	60	65
Residential, High Density	65	70
Schools	60	70
Commercial, Office	65	75
Industrial	70	75

These standards are based on standards and guidelines of the U.S. Environmental Protection Agency, the U.S. Department of Housing and Urban Development and the California Department of Housing and Community Development and are intended to insure that noise levels are low enough to prevent annoyance from noise for most people.

Figure 8.2 in the General Plan illustrates circulation system elements resulting in potentially significant noise impact, and noise impact area estimates based on the Federal Highway Administration Highway Traffic Noise Model with simplified adjustments made for terrain effects where major terrain features result in noise shielding.



Mitigation  
Measures

Policies of the general plan are expected to mitigate noise impacts of new development and new arterial construction to insignificant levels. These policies require the following:

1. Design of land use and circulation system elements to prevent noise problems.
2. Sound insulation in structures where noise levels exceed the noise standards of the noise element in accordance with California noise insulation standards.
3. Noise barriers as a preferred noise control measure to sound insulation where feasible.
4. A noise ordinance including numerical noise standards to aid in reducing other noise problems that may arise.





### 3.6 Light and Glare

#### Environmental Setting

Many areas in Agoura Hills are currently undeveloped. The hillsides and the canyons contain large amounts of vacant land. This open space is very important to the variety and concentration of wildlife in the Agoura Hills area.

Lighting in the project area includes street lights and residential and commercial interior and exterior lighting. Bright commercial lighting is used along the Ventura Freeway corridor and the adjacent Agoura Road and Kanan Road. Thousand Oaks Boulevard and Reyes Adobe Road, as major residential arterials, are also brightly lit.

#### Environmental Impact

Increased lighting, both in terms of amount and intensity, will result from the project. The increased development allowed for under the General Plan for buildings and for street lighting will cumulatively impact the project area. There are several impacts of light and glare, including aesthetic impacts and impacts on native wildlife. The rural character of the area will be diminished with increased development and lighting.

Night lighting has several adverse impacts on wildlife in surrounding open space areas. Some of these impacts are the disruption of light-dark daily rhythms and the avoidance of an area due to increased exposure to bright lights. Although some insectivorous species benefit from lighting since it attracts large numbers of insects for feeding purposes, the net effect of lighting is that wildlife do not use adjacent areas to their fullest extent.

#### Mitigation Measures

The adverse effects of lighting on wildlife as well as aesthetics can be lessened by several mitigation measures. These include shielding light sources, use of low intensity street lamps and street lighting only at intersections. The Hillside Development Ordinance recently adopted by the City of Agoura Hills will control development in the hillside areas. Lighting plans can be reviewed at project approval to ensure that no unnecessary glare exists. Especially in areas where low density development only will be allowed, private sources of illumination can be controlled. The extent of utilization of these measures should be a function of the proximity of the light source to the urban fringe.



### 3.7 Land Use

#### Environmental Setting

Agoura Hills is located at the urban fringe of one of the most rapidly growing urban centers in the United States. The radius of residential development supporting employment in the Los Angeles/Orange County area has recently reached Agoura Hills. As a result of this regional growth, the City and surrounding areas have grown rapidly, doubling in population in each of the last two decades.

The study area currently contains residential uses and retail/service uses. There are no industrial uses in the study area.

Figure 10 on page 71 shows the existing land uses in the project area. Figure 11 on page 73 shows land uses under the proposed General Plan.

The study area contains 17,398 acres, 40% of which is within the City of Agoura Hills. Within the city limits, the majority (57%) of the land is vacant. Residential land uses are the second largest land use category, with single-family residential units comprising the bulk (88%) of the 1218 residential acres. Retail/service/business park uses account for 193 acres, or 4% of the acreage within Agoura Hills.

In the remainder of the study area, almost the entire area is vacant (92%). Five percent of the study area contains residential uses and less than one percent of the study area contains retail/service uses.

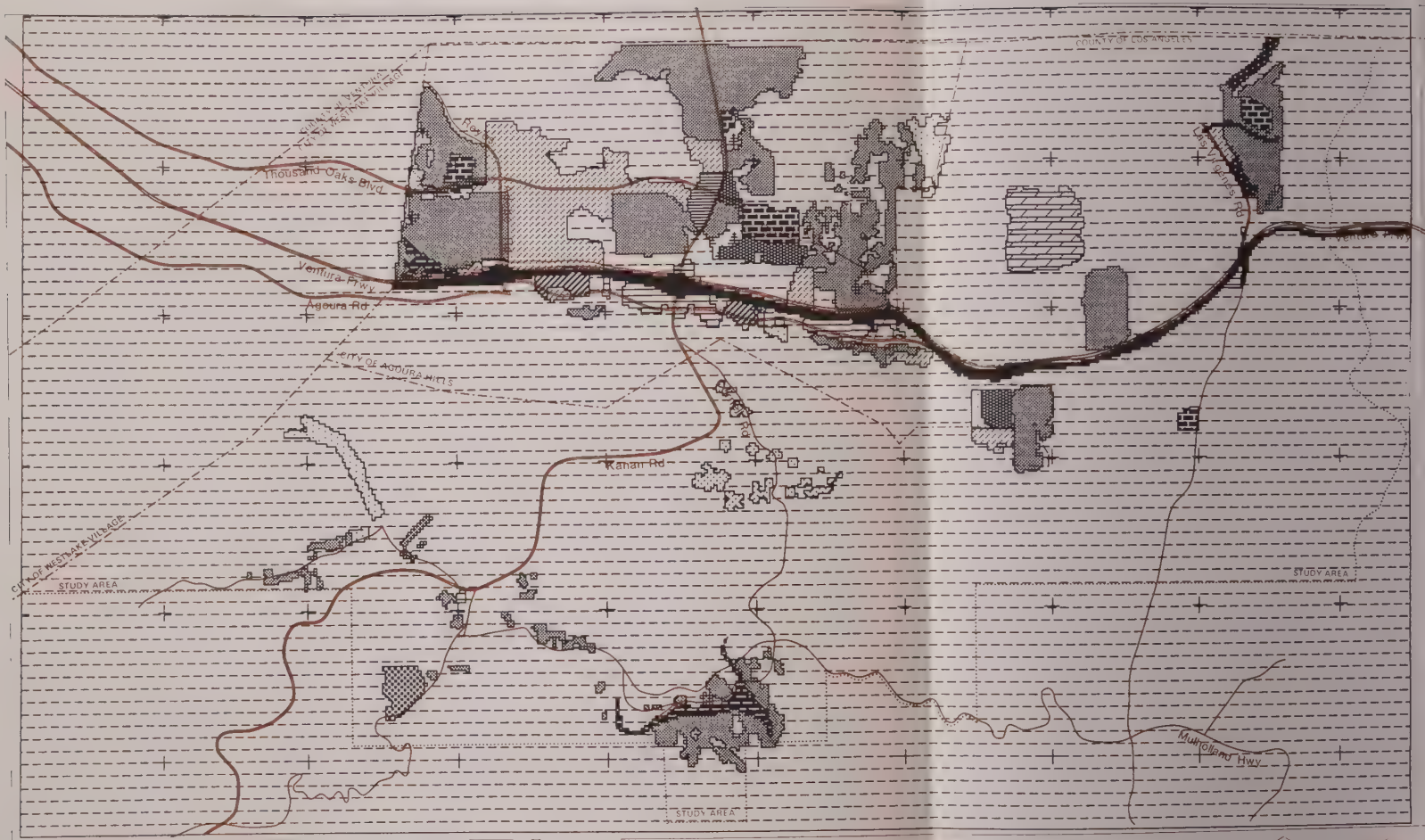
#### Environmental Impact

The purpose of the General Plan is to ensure a balanced community, by providing an opportunity to live near one's employment which has the potential to reduce vehicle travel and therefore air pollution and energy consumption compared to a bedroom community serving more distant employment centers.

In addition, employment centers, retail and tourism in general provide a fiscal balance to the community. Residential land uses in general do not pay their full cost to a community in taxes, and other land uses help to offset this net cost to varying degrees.

The undeveloped portions of the City are proposed to be developed as a balanced residential community. Table 14 details the land uses proposed under the General Plan.





### Existing Land Use

- Resid-Rural 0-1/acre
- Resid-Very Low 1-2.5/acre
- Resid-Single 2.5-7/acre
- Resid-Medium 7-12/acre
- Resid-High 15+/acre
- Shopping Center
- Retail/Service
- Hotel/Motel/Tourist
- Business Park
- Office
- Industrial
- Park/Recreation
- School
- Government Office
- Utility
- Transportation
- Landfill
- Other Public
- Commercial Recreation
- Mobile Home
- Graded
- Open Space
- Vacant
- Open Water

## AGOURA HILLS GENERAL PLAN **EIR**



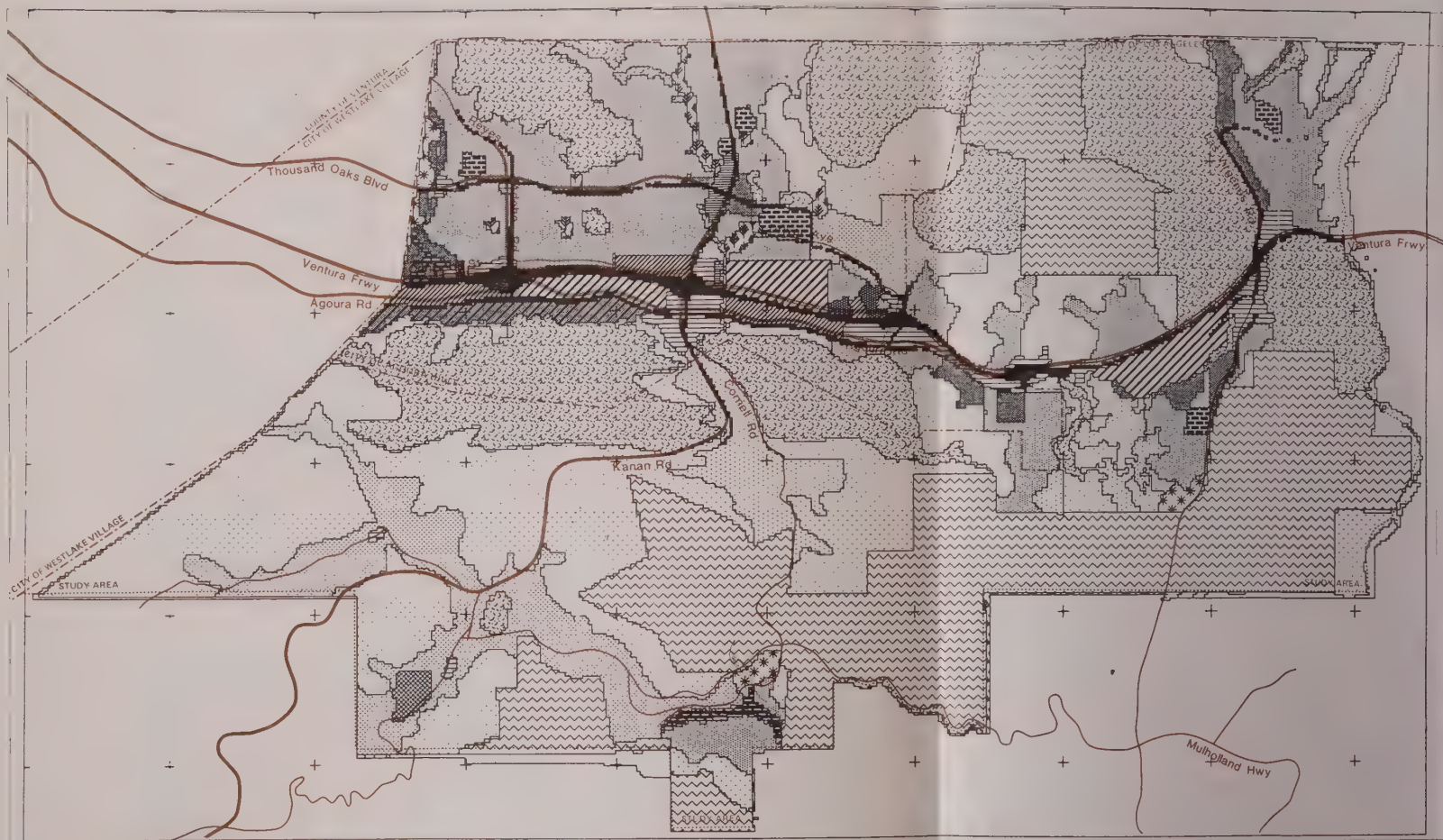
**The Planning Group**  
Planners, Architects &  
Engineers & Scientists  
Barton-Aschman Associates  
Williams Kuebelbeck Associates  
Leighton & Associates

**FIGURE 8  
EXISTING LAND USE**







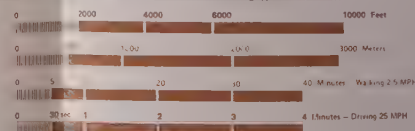


# Proposed Plan

- Resid-Rural .05-.2/acre
- Resid-Very Low .2-1/acre
- Resid-Low Density 1-2/acre
- Resid-Single 2-6/acre
- Resid-Medium 6-10/acre
- Resid-High 10-35/acre
- Shopping Center
- Retail/Service
- Business Pk-Manufacturing
- Business Pk-Office/Retail
- Mixed Commercial/Resid
- Local Park
- School
- Government Office
- Transportation
- Other Public
- Commercial Recreation
- Mobile Home
- Open Space
- Regional Park/Recreation
- Open Water

FIGURE 9.  
PROPOSED LAND USE

AGOURA HILLS  
GENERAL PLAN **EIR**



Barton-Aschman Associates  
Williams Kuebelbeck Associates  
Leghion & Associates



TABLE 15  
GENERAL PLAN LAND USES

Planning Area	Land Use	Area (ac)	Units/ac	Units	per unit	Total
CITY TOTAL	Resid-Rural (.05-.2/ac)	191	0.1	19 du	2.8	53 people
	Resid-Very Low (.2-1/ac)	287	0.5	144 du	2.8	402 people
	Resid-Low (1-2/ac)	205	1.6	328 du	2.8	918 people
	Resid-Single (2-6/ac)	1455	4.0	5820 du	2.5	14550 people
	Resid-Medium (6-15/ac)	127	9.0	1143 du	1.7	1943 people
	Resid-High (15-35/ac)	36	18.0	648 du	1.4	907 people
	Resid-Cluster	42	12.0	504 du	1.5	756 people
	Open Space	1533	varies	234 du	2.8	655 people
	TOTAL RESIDENTIAL	3876		8839 du		20185 people
	Shopping Center	32	6.5	209 ksf	2.0	418 employees
	Retail/Service	223	6.5	1457 ksf	2.0	2914 employees
	Hotel/Motel/Tourist	20	21.8	436 ksf	1.0	436 employees
	Business Park	138	10.9	1503 ksf	2.0	3006 employees
	Business Park-Office/Ret	180	18.7	3372 ksf	4.0	13486 employees
	Mixed Coml/Residential	89	4.4	388 ksf	4.0	1551 employees
STUDY AREA TOTAL	Local Park	78	1.0	78 ac	0.2	16 employees
	School	73	5.0	365 ksf	1.0	365 employees
	Transportation	223	1.0	223 ac	0.0	0 employees
	Commercial Recreation	25	1.0	25 ac	0.1	3 employees
	Open Water	13	1.0	13 ac	0.0	0 employees
	TOTAL NONRESIDENTIAL	1094		7364 ksf		22194 employees
	Resid-Rural (.05-.2/ac)	3445	0.1	345 du	2.8	965 people
	Resid-Very Low (.2-1/ac)	514	0.5	257 du	2.8	720 people
	Resid-Low (1-2/ac)	1034	1.6	1654 du	2.8	4632 people
	Resid-Single (2-6/ac)	809	4.0	3236 du	2.5	8090 people
	Resid-Medium (6-15/ac)	172	9.0	1548 du	1.7	2632 people
	Resid-High (15-35/ac)	0	18.0	0 du	1.4	0 people
	Resid-Cluster	36	12.0	432 du	1.5	648 people
	Open Space	2478	0.2	496 du	2.8	1388 people
	TOTAL RESIDENTIAL	8488	0.0	7968 du	0.0	19074 people
	Retail/Service	91	6.5	594 ksf	2.0	1188 employees
	Business Park	136	10.9	1481 ksf	2.0	2962 employees
	Regional Park/Recreation	3965	1.0	3965 ac	0.0	0 employees
	School	33	5.0	165 ksf	1.0	165 employees
	Transportation	95	1.0	95 ac	0.0	0 employees
	Commercial Recreation	55	1.0	55 ac	0.1	6 employees
	TOTAL NONRESIDENTIAL	4375		2075 ksf		4320 employees



In most large undeveloped parcels, the details of land use will be determined in the City review and approval of specific plans for each development. In reviewing specific plans, the City will follow the policies of the General Plan, its implementing ordinances and the City's then current interpretation of the relative importance of its goals and objectives.

Several overlay districts are included in the General Plan as a means to control the impacts of development in addition to regular land use controls. Overlay districts in the Agoura Hills General Plan include: Flooding Zones, Geologic Hazard Districts, Hillside Development District, and the Ladyface Mountain Design District. Overlay districts for the U. S. 101 corridor, Old Agoura, Indian Hills and significant ecological areas are also included in the General Plan.

The City's zoning ordinance will contain development standards for the development of individual parcels for commercial use. These development standards are intended to reduce impacts of development on adjacent parcels to insignificant levels. Compliance with the provisions of the zoning ordinance and the City's design review of major projects are expected to reduce impacts of development on adjacent land uses to insignificant levels.





### 3.8 Natural Resources

#### Environmental Setting

Potential natural resources impacts include increasing the rate of use of any natural resources or substantial depletion of non-renewable natural resources.

#### Environmental Impact

The project will result in the commitment of building materials and energy to project construction. This use of these resources is an insignificant portion of the available resource, and such impacts are considered insignificant.

#### Mitigation Measures

None.



### 3.9 Risk of Upset

#### Environmental Setting

Risk of upset includes risk of explosions, release of hazardous substances in the event of accident or upset conditions. The project does not represent an unusual risk of explosions or release of hazardous substances beyond the risk posed by other similar development projects. Regulations by other agencies regulating the storage and use of hazardous substances are expected to reduce these potential risks to a minimum.

There are two kinds of upset conditions that can occur in Agoura Hills -- those upsets caused by fire and those upsets that result from flooding. Flooding impacts are discussed under Section 3.3, Water Quality. Fire and its relationship to the City of Agoura Hills is discussed below.

Fire About 3/4 of the Santa Monica Mountains has been burned more than once in the past 50 years (Santa Monica Mountains Comprehensive Plan, p. 17). There have been several major fires in the Agoura Hills area including the October 1978 Kanan-Agoura fire. The area west of Kanan Road has burned only once since 1945; however, the area between Kanan Road and Las Virgenes Road north of the Ventura Freeway has burned four or more times since 1945. (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-34)

Most fires are caused by human activity. For all of California, approximately 90% of all fires are caused by human activity with the remaining 10% caused primarily by lightning. In the Malibu/Santa Monica Mountains area, however, the amount of human-caused fires is greater and accounts for about 99% of all fires. (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-27) Since man is the cause of most brush fires, population increases in the Agoura Hills area will lead to increases in fire frequency.

Chaparral and coastal sage scrub have the highest relative combustibility in the study area. Fuel loading (the quantity of flammable vegetation per unit of land area) for these communities is frequently greater than 40 tons per acre (Final Environmental Impact Report, Malibu/Santa Monica Mountains Area Planning Program, p. 5-27). The combustibility of the southern oak woodland community is moderate and that of riparian communities is low.

Fire is an ecologically-important event in chaparral and coastal sage scrub communities, and it is natural for brush fires to occur every 15 to 20 years. It takes about 15 to 20 years for brush to reach its maximum density. While the chaparral matures, the ratio of dead



to living biomass increases. As the period of time between brush fires increases, dead branches impair wildlife movement and decrease the food source of some animals. The chaparral community itself depends on fires to regenerate, with some species regenerating only after a fire has occurred.

The California State Division of Forestry in 1973 published a Fire Hazard Severity Classification System which classified most of the Malibu/Santa Monica Mountains area as a critical fire hazard area. This classification is based on fuel-loading, weather and slope. As mentioned, fuel-loading in chaparral and coastal sage scrub is great. During Santa Ana conditions until rain arrives, the fire hazard is most severe, with winds of 50-60 miles per hour. These fires usually start inland and are fanned into steep canyons by the winds. Due to the intensity of the fires, control is very difficult.

Slope is the third critical factor in the fire hazard severity classification system. Every 10% increase in slope doubles the speed at which fire spreads (Santa Monica Mountains Comprehensive Plan, p. 11). The fire hazard to hillside development from slope is compounded because the hillsides are often covered with fire-prone vegetation and are less accessible to fire fighters.

Based on these three fire hazards, the Liberty and Las Virgenes Canyons south of the Ventura Freeway are moderate fire hazard areas with the fire hazard of the hillsides between the canyons classified as high to extreme. The Medea Valley area is a moderate fire hazard area. Palo Comado Canyon both north and south of the Ventura Freeway is exposed to extreme fire hazards. Most of the area north of the Ventura Freeway and west of Kanan Road is considered to be a moderate fire hazard area.

Environmental  
Impact

Projected growth in the study area will increase the risk of fire hazard. The loss of life and property due to fire is considered to be an unavoidable adverse impact associated with development. Increased traffic on the Ventura Freeway and cross-mountain corridors can increase the risk of fire hazard from human activity due to carelessness and traffic accidents. Archaeological resources are also destroyed by fire and fire suppression techniques.

Fire suppression techniques threaten the ecology of chaparral and riparian communities. Fire roads and firebreak construction as well as development requires removal of vegetation. The loss of vegetative ground cover around roadways and other development increases erosion potential and flood damage.





Paradoxically, fire control has led to greater danger. There has been some evidence to indicate that as chaparral increases in age from twenty to thirty years, the average size of a fire doubles (Santa Monica Mountains Comprehensive Plan, p. 17).

Mitigation  
Measures

There are several development controls that can aid in reducing the threat of fire. These include adoption and enforcement of a non-combustible roofing ordinance, provision of more than one access point for emergency vehicles and resident evacuation and planting with fire-retardant vegetation.

Increased public information can alert residents and visitors to natural fire conditions and suggest how to live with and minimize fire hazard risk. Part of the informational role in fire reduction is to centralize the monitoring of fire weather and fuel-loading for the entire Santa Monica Mountains area. This would facilitate the furnishing of information to local fire agencies and aid in reducing the time between the start of a fire and the time it is discovered, thereby minimizing damage. This increased information may lead to the closing of recreational areas during extreme fire hazard conditions.

Fire hazard can also be reduced by controlled burning and constructing greenbelts. The value of selective burning has been recognized by fire ecologists as a means of reducing the fuel load of an area. This method has not been used on a large scale because technology is not adequate and the absence of laws allowing the fire department to burn on private land or to force land owners to do so.

Although the cost of greenbelt construction is high, it can be viewed as part of the price of living in hillside areas. These greenbelts are strategically located non-linear strips on which dense flammable vegetation is replaced with vegetation of lower fuel volume. The minimum effective width of greenbelts is 200 feet and the size is a function of terrain, expected fuel conditions, weather conditions and economics (Summary Santa Barbara Front Fuel Management Block, Draft Environmental Assessment Report). This fuel modification measure, in addition to lessening the likelihood and effects of fire, can serve a valuable function as open space.



### 3.10 Population

#### Environmental Setting

The City of Agoura Hills is experiencing rapid population growth and currently contains a household population of 16,653 persons. Between 1970 and 1980 the unincorporated area that would eventually form the City boundaries in 1982 added population at the rate of 12.4 percent per year. In the last three years since 1980 the City's growth rate has slowed somewhat to 6.8 percent per annum. By comparison, the County of Los Angeles added population from 1970 to 1980 at only 0.8 percent per year and from 1980 to 1983 the County grew at 0.6 percent annually.

During the remainder of this decade the City of Agoura Hills is projected to add from 4,000 to 6,000 additional persons. By 1990 the City population is forecasted to total between 20,000 and 23,000. The entire study area would be expected to grow slightly faster than the City totalling from 24,800 to 28,100 persons by year 1990.

#### Environmental Impact

The proposed project has the potential to encourage population growth in the project's housing and employment market area by providing additional jobs on the project site that would otherwise locate elsewhere in Southern California. Table 16 summarizes projections of population, housing and employment for the project's housing/employment market area from the SCAG-82 Growth Forecast Policy.

The proposed project has the potential to provide employment for approximately 18,902 people within the City and an additional 4,043 people in the study area, excluding the City of Agoura Hills. Combined, this represents 115% of the primary housing/employment market area's projected employment growth from 1980 to 2000.

The proposed project will also provide indirect employment (that employment caused by the directly affected industries buying needed inputs or supplies from other industries) and induced employment (that employment that arises from the households' spending wages or income received from both the directly and indirectly affected industries, thus further increasing demand). Appropriate multipliers to determine indirect and induced employment in the Southern California area were identified in the study "SCAG Region Input-Output Model", published by SCAG in 1978. Based on multipliers for typical retail, service and business park uses, the proposed project, including both the City and the remainder of the study area, will provide up to 37,791 indirect and induced jobs. This represents 189% of the primary housing/employment market area's projected employment growth from 1980 to 2000. Combined, the

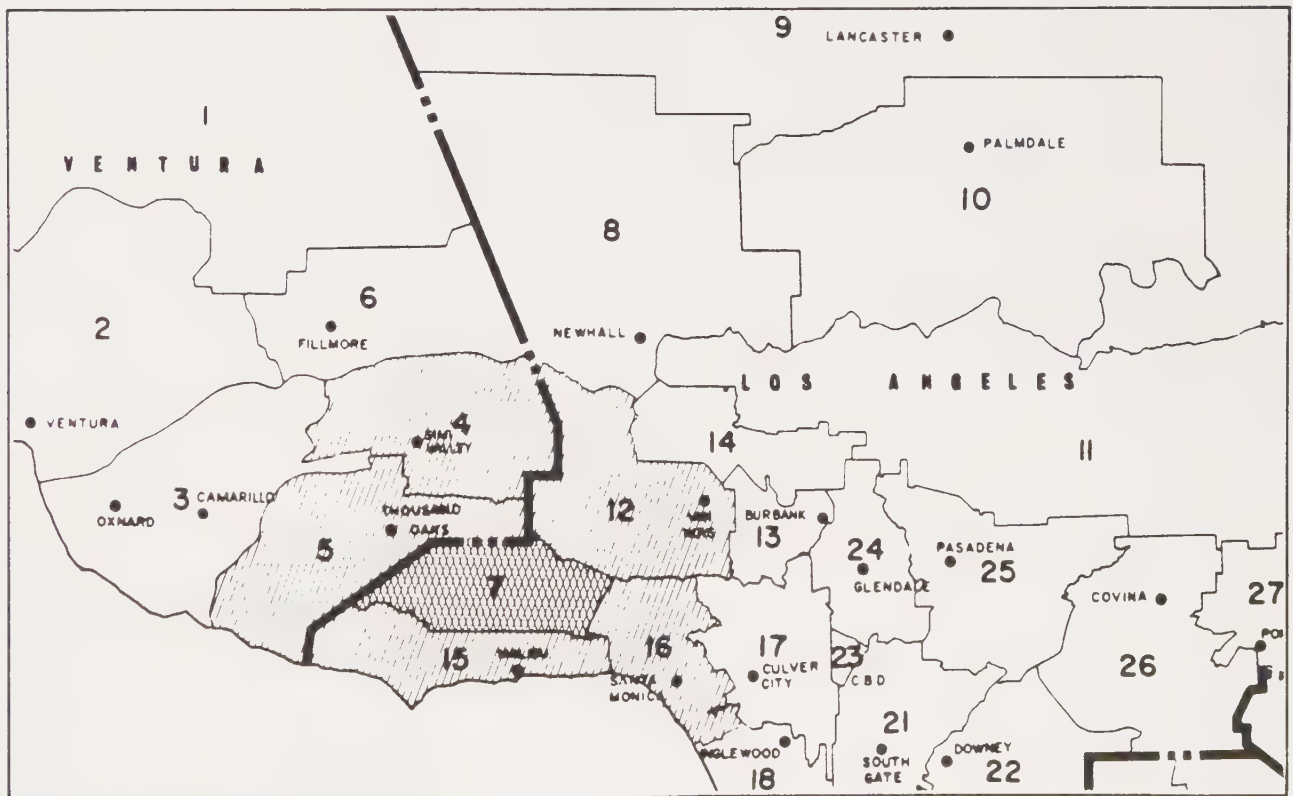


TABLE 16

POPULATION, HOUSING AND EMPLOYMENT PROJECTIONS  
FOR AGOURA HILLS HOUSING/EMPLOYMENT MARKET AREA

Statistical Area	Projections in Thousands					
	Population		Housing		Employment	
	1980	2000	1980	2000	1980	2000
7. Agoura	37	73	6	13	10	30
TOTAL PRIMARY	37	73	6	13	10	30
Jobs/100 people					27	41
4. Simi	89	153	17	26	17	36
5. Thousand Oaks	96	167	15	33	25	59
12. SW San Fernando Valley	574	647	182	235	283	352
15. Malibu	16	32	5	7	6	10
16. Santa Monica	305	329	128	149	156	181
TOTAL SECONDARY	1,080	1,328	347	450	487	638
Jobs/100 people					45	48
SCAG Region	11,536	14,752	4,428	5,988	5,606	7,640
Jobs/100 people					49	52

Source: Southern California Association of Governments,  
SCAG-80 Growth Forecast Policy, October 7, 1982.

FIGURE 12  
REGIONAL STATISTICAL AREAS





direct, indirect and induced jobs created by the project represent over 300% or 60,736 jobs in the primary housing/employment market area's projected employment growth from 1980 to 2000.

Currently, there are fewer jobs in Agoura Hills than there are members of the labor force. A large amount of the labor force in Agoura Hills is exported to surrounding jurisdictions. The large increase in jobs as a result of this project would reverse this situation, creating a surplus of jobs over laborers in the Agoura Hills area. As a result, workers from surrounding jurisdictions would be expected to commute to Agoura Hills to fill excess jobs within the City created as a result of the project.

The subregion in which the project is located is an employment deficit area, with a ratio of 27 jobs per 100 people compared to a regional average of 49 jobs per 100 people (1980). The subregion will continue to be an employment deficit area in the year 2000, with a ratio of 41 jobs per 100 people compared to a regional average of 52 jobs per 100 people. Because the area is an employment deficit area, expansion of employment beyond regional forecasts is supported by regional policy.

Because SCAG's policy is to adopt local agency policy regarding population and land use, the project land uses would be expected to be integrated into future editions of the growth forecast policy.

To the extent that the proposed project represents employment that would otherwise not locate in the SCAG region if the project were not undertaken, the project represents additional population impact for the region. In general, the project is expected to be a substitute for employment that would otherwise be provided elsewhere in the region.

Mitigation  
Measures

The population increments expected to be generated by this project will result in higher levels of traffic and increase demands on municipal agencies. Measures to reduce such impacts include various measures to increase services to the area. These are discussed elsewhere in the DEIR.



### 3.11 Housing

#### Environmental Setting

The project is located at the urban fringe of one of the most rapidly growing urban centers in the United States, with over half of the acreage in the City currently vacant and 90% of the remainder of the study area vacant. There are 5,133 dwelling units in the City, of which 4,326 are single-family detached units. In the remainder of the study area, there are an additional 2,639, the bulk of which are single-family detached. In both the City and the study area, residential land uses account for just under 5% of the total land area. Total housing projected for the housing/employment market area is summarized in Table 16.

By Los Angeles County standards, the housing stock in Agoura Hills has been constructed recently. Fifty percent of the homes within the City have been built in the last eleven years since 1973, whereas county-wide the median age of the housing stock is 29 years. Dwelling units within Agoura Hills are generally more expensive than the County average. The median housing value within Agoura Hills currently stands at \$136,549, a figure 56 percent higher than the County median value of \$87,400. Moreover, 90 percent of the homes within the City are valued over \$100,000. Prices of new condominiums and townhomes in Agoura Hills range from \$62,900 to \$145,000. New single-family detached homes are offered at prices from \$118,000 to \$365,000, with the average asking price equal to \$198,500.

#### Environmental Impact

The proposed project will have a direct impact on housing. Approximately 3,500 dwelling units will be constructed in the City. Over 60% of these units will be single-family residences (.05-6 dwelling units/acre) with less than 10% of the units for high density residential development (16-35 dwelling units/acre). Combined, single, medium and high density residential uses will provide housing for over 7,500 people. Of the approximately 5,300 dwelling units to be constructed in the remainder of the study area, 70% will be single-family residences and 30% will be medium density residences (7-15 dwelling units/acre). No high density residences are planned. Combined, these residences will provide housing for 12,000 people.

These increases in housing development respond to projected population and current trends in housing size (Demographic and Economic Analysis, City of Agoura Hills).

The demand for housing in Agoura Hills is expected to be significant throughout this decade. By 1990 it is projected that from 2,184 to 3,252 additional housing



units would be required within the City to meet rising demand. This would increase the City's total housing stock by 1990 to between 7,925 and 8,942 units. Under the low growth forecast the entire Study Area would require 2,338 additional homes over the next six years. Alternatively, a total of 3,450 new units would be required by 1990 should the population rise at the forecasted high-growth rate.

Throughout the remainder of this decade the City of Agoura Hills would capture from 72 to 105 acres annually of new residential development. By 1990 a total of between 503 and 736 additional acres would be developed to meet new residential demand within the City.

The proposed project will also have indirect impacts on housing. By providing jobs at the project site, the project will increase housing demand in the project's housing/employment market area. At the regional ratio of one job for every 0.79 housing units, the project would be expected to create a demand for an additional 18,127 housing units in the region in the long term. At least half of the employees working at the project site would be expected to work within the primary and secondary housing and employment market area indicated on Figure 12. 18,127 housing units represents 139% of the housing units in the primary housing/employment market area (in the year 2000), but only 4% of the housing units in the primary and secondary housing and employment market areas for the project (in the year 2000). Although the project represents a small percentage of the housing stock available in the primary and secondary housing/employment market area, in the primary housing/employment market area alone, the project represents a large portion of housing stock in the year 2000.

The proposed units, which represent 139% of the primary housing/employment market area's housing growth by the year 2000 is inconsistent with the regional growth forecast policy.

Because SCAG's policy is to adopt local agency policy regarding population and land use, the project land uses would be expected to be integrated into future editions of the growth forecast policy and would then be consistent with it.

The value of the housing stock in Agoura Hills is expected to increase with the adoption of the General Plan. Currently 90% of the homes in Agoura Hills are valued at over \$100,000 and more than one-third of the housing stock is valued in excess of \$150,000. In contrast, a substantially smaller portion, 38%, of all





Los Angeles County homes are valued above \$100,000  
(Demographic and Economic Analysis: City of Agoura  
Hills, p. III-6).

Mitigation  
Measures

The General Plan's Housing Element outlines a program to provide affordable housing within the City. Components of this program include the provision of maintenance loans for low/moderate income households, Section 8 information/referral and density bonuses for low- and moderate-income housing.



### 3.12 Transportation/Circulation

#### Environmental Setting

Most of the study area lies north of U.S. 101 just south of Westlake Village. U.S. 101, running east-west, is the only major state highway serving the study area. The most significant east-west arterials serving the study area are Agoura Road and Thousand Oaks Boulevard. The most significant north-south arterials are Kanan Road, Chesebro Road and Reyes Adobe Road. Mulholland Highway and the Las Virgenes/Malibu Canyon Road also serve the study area.

The majority of other roadways in the City are local or collector streets which are basically two-lane roads serving residential areas. The key exception is Canwood Street which serves as a two-lane roadway providing access to various commercial activities parallel to U.S. 101. It functions as a frontage road to the freeway but is not continuous through the City. It is continuous from Kanan Road to Reyes Adobe Road.

Traffic volumes on the key arterials in the City were obtained from Caltrans and the Los Angeles County Road Department. The significant volumes are listed in Table 17. It can be seen from these sources that the volumes on U.S. 101 vary from 102,000 vehicles per day to 106,000 vehicles per day. On Kanan Road, they vary from 9,800 vehicles per day north of Fountainwood Street to 30,700 vehicles per day north of Canwood. Volumes on Agoura Road vary from 2,200 vehicles per day west of Chesebro Road to 4,700 vehicles per day west of Kanan Road. On Thousand Oaks Boulevard, counts taken in mid-1983 indicate volumes of 7-9,000 vehicles per day. It is expected that these volumes will increase significantly for another year or so in that the highway was only recently opened.

Traffic volumes are in general well below capacity of roadways and intersections except in the immediate vicinity of freeway ramps. Some additional problem areas may be expected as development takes place, as discussed below.

The Malibu/Santa Monica Mountains Area Plan identified several regional scenic highways in the Agoura Hills study area. Kanan-Dume Road, Malibu Canyon Road/Las Virgenes Road and the Mulholland Highway were given first priority designations. The Ventura Freeway is of second priority in the County Plan.

The proposed Plan also identifies local scenic roadways, including Agoura Road, Thousand Oaks Boulevard, Driver, Canwood and Roadside.



TABLE 17

## EXISTING AND DESIGN TRAFFIC VOLUMES FOR ARTERIAL STREETS

Street Location		Volume (vehicles/day)	
		Existing	Design
Agoura Road	west of Reyes Adobe Road	3,400	15,800
	west of Kanan Road	4,700	17,100
	west of Chesebro Road	2,200	12,900
Canwood Street	west of Lake Lindero	1,000	
	west of Reyes Adobe Road	4,000	
Chesebro Road	north of Agoura Road	2,300	8,600
	north of 101		10,200
Driver Avenue	east of Argos Street	4,700	
	east of Fairview Street	4,000	11,500
	east of Chesebro Road		1,200
Kanan Road	north of Fountainwood Street	9,800	9,800
	north of Thousand Oaks Blvd.	19,000	19,000
	north of Canwood Street	30,700	45,000
	north of Agoura Road	10,200	40,200
	south of Agoura Road	14,950*	
Lake Lindero Drive	north of Thousand Oaks Blvd.	4,350	4,350
	north of Canwood	2,700	2,700
Thousand Oaks Blvd.	west of Kanan Road	9,000	17,000
	east of Lake Lindero	8,000	16,000
	west of Lake Lindero	7,000	15,000
Reyes Adobe Road	at U.S. 101	6,470	35,470
	north of Agoura Road	6,010	40,700
U.S. 101	east of Chesebro Road	102,000	260,000
	east of Kanan Road	100,000	230,000
	east of Reyes Adobe Road	106,000	176,000
	west of Reyes Adobe Road		156,000

\*Summer Sunday count.





Several transportation improvements are planned for the study area.

- o Agoura Road will be built from Liberty Canyon to Las Virgenes as part of the Currey-Riach development
- o Lost Hills Road will be built from U.S. 101 to Las Virgenes as part of the Currey-Riach development
- o Extension of Kanan Road and Lindero Canyon to meet each other and connect to State Route 22.

Two Southern California Rapid Transit District (SCRTD) bus lines currently serve the study areas. Line 423 (Westlake-Woodland Hills-Los Angeles) provides express service to the study area along the Ventura Freeway. Line 161 (Westlake-Canoga Park) is a local line, serving the study area via Dorothy Drive and the Ventura Freeway. Line 161 offers weekday service (Monday through Friday) at one-hour intervals from 7 AM to 7 PM. Line 423 provides weekday peak-hour service only.

The quantity of service provided by the District is determined by population of the area and ridership. For the Agoura Hills area, the District provides a basic minimum policy level of service, which is adjusted according to demand.

New development can affect District service if the development increases traffic congestion or substantially increases bus ridership in the area. In addition, development which affects vehicle circulation (for example, street closures, street widenings, or other reconstruction activities) will also have an impact on District service.

There are presently no problems with service delivery, and current levels of ridership within the study area do not warrant service expansion. The availability of funding for public transit and the provision of equipment are potential problems that may affect Agoura Hills if development generates increased demand for bus service. The District recommends that communities desiring service expansion use their share of the transit sales tax local return funds. (Letter from Daniel Miller, Environmental Coordinating Officer, Southern California Rapid Transit District, 1/6/84.)

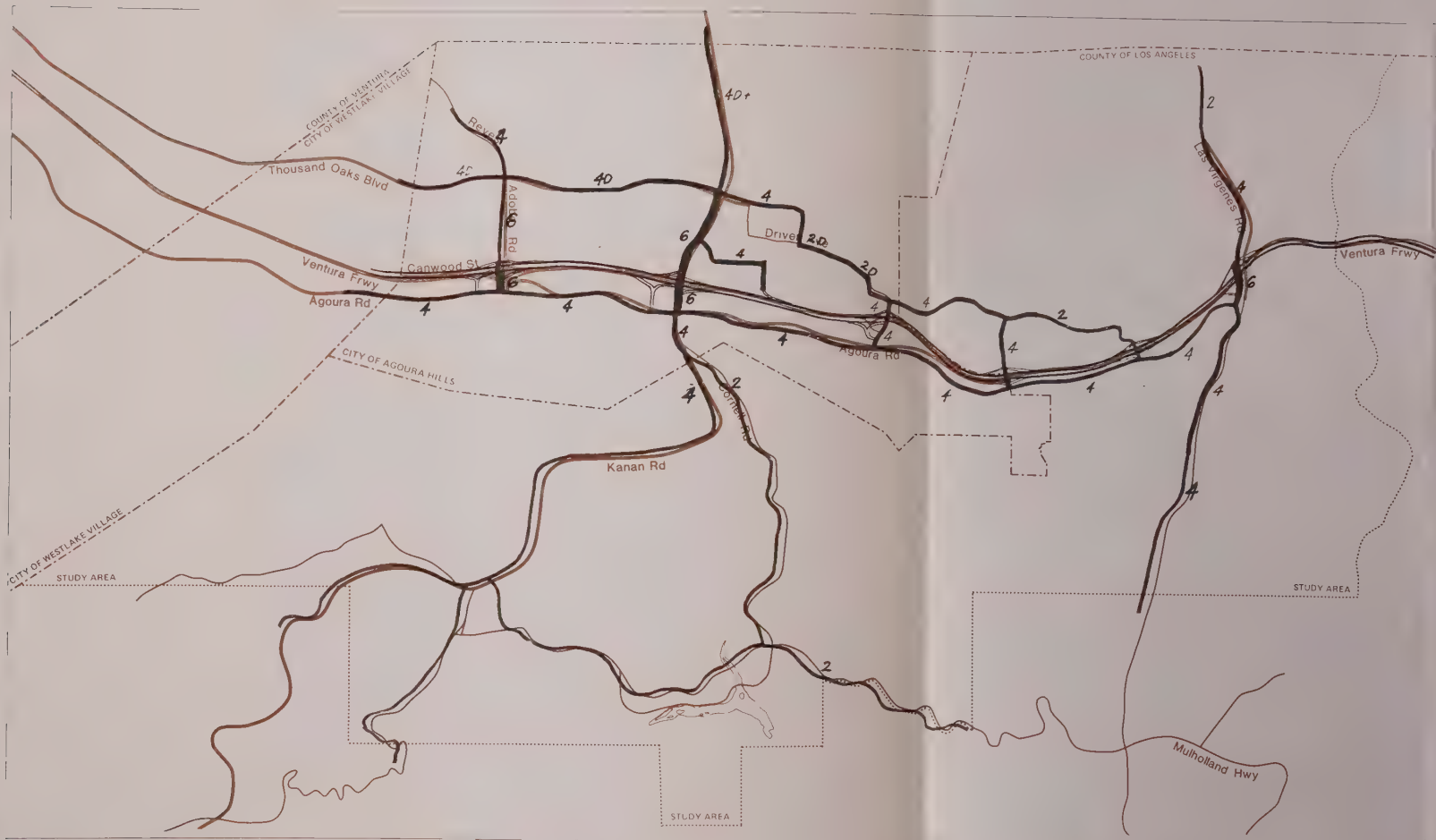
Bicycle circulation and trails are discussed in Section 3.17.

There are several problems with the existing circulation system:



- o The existing freeway ramp system provides inadequate access to and from Highway 101 to support any significant additional development in the freeway corridor.
- o Congestion at the Kanan/U.S. 101 Interchange at peak hours causes delays and safety problems. Although the interchange has been improved with a widened bridge, left-turn lanes and wider ramps, traffic volumes already are at capacity. Conflicts exist in the morning hours between residents from Agoura Hills and Oak Park wishing to travel east on Route 101, and workers from the east wishing to use Kanan Road to reach their places of employment on the south side of the freeway. Similar conflicts exist at the evening peak with travel in the opposite direction.
- o Narrow bridges over U.S. 101 at Reyes Adobe Road and Chesebro Road have only two lanes and were designed to serve only rural traffic volumes.
- o The lack of alternative east-west routes through the City results in use of U.S. 101 for regional access and local travel.
- o The lack of alternative access to Oak Park in Ventura County north of the City results in potential emergency access problems for that community, and has the potential to create severe congestion in Agoura Hills as Oak Park grows. Although the expansion of Oak Park depends on extension of Kanan Road and Lindero Canyon Road to provide alternate access from the west to Oak Park, the ultimate distribution of vehicle trips from Oak Park is difficult to anticipate.
- o Safety problems along most arterials exist because these arterials were built to rural standards and without curbs and gutters.
- o A lack of adequate internal circulation within the City results from inadequate circulation planning or incomplete system implementation in the past, leaving a number of areas within the City with only one access point for daily or emergency travel. Some relatively large areas in Old Agoura are served only by private streets. These streets are not developed to current urban street standards for width, surface and ability to handle storm water.





- Freeway
- Freeway Ramp
- Major Arterial
- Primary/Secondary Arterial
- Local Arterial

FIGURE 11  
CIRCULATION SYSTEM

## AGOURA HILLS GENERAL PLAN **EIR**



**STANLEY GROUP**  
Planners, Engineers &  
Architects & Scientists  
Barton-Archman Associates  
Williams Kuebelbeck Associates  
Leighton & Associates





Environmental  
Impact

Development of the Agoura Hills General Plan Study Area will have a significant impact on traffic both within the study area and outside the study area on regional arterials and freeways. Principal traffic growth results from commercial and industrial development. Because this development is located adjacent to the Ventura Freeway, impacts will be limited to the freeway itself and arterials serving the freeway.

Because Agoura Road provides local circulation within the commercial/industrial area, Agoura Road is expected to see significant growth in traffic.

Principal impacts of development include:

- o Significant increases in traffic at freeway ramps and on freeway bridges, exceeding current capacity of these facilities.
- o Significant increases in traffic on Driver and Agoura Road, requiring improvements to provide safety and capacity.
- o Significant increases in traffic on Kanan Road, both from Oak Park growth and commercial/industrial growth in Agoura Hills.

Trip generation from proposed development is summarized on Table 18. Resulting traffic volumes on local arterials and freeways is summarized on Table 17.

The proposed project will result in construction of a number of circulation improvements to support the increase in traffic. Principal improvements include freeway ramp improvements at Reyes Adobe Road, Kanan Road and Chesebro Road; widening and realignment of Agoura Road and improvement of Driver Avenue. New local streets will serve newly developed areas in some areas of the City. This construction will result in temporary disruption of existing traffic patterns, in some cases for periods as long as 6 months to 1 year for major construction.



CITY OF AGOURA HILLS  
TRIP GENERATION

TABLE 18  
TRIP GENERATION

LAND USE	trips per unit	-----Existing Use-----		-----Proposed Plan-----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	10.0	4326 du	43260 trips	6363 du	63630 trips	2037 du	20370 trips
Resid-Medium (7-15/ac)	8.0	738 du	5904 trips	1692 du	13536 trips	954 du	7632 trips
Resid-High (16-35/ac)	6.0	69 du	414 trips	324 du	1944 trips	255 du	1530 trips
Open Space	9.0	0 du	0 trips	234 du	2106 trips	234 du	2106 trips
TOTAL RESIDENTIAL		5133 du	49578 trips	8613 du	81216 trips	3480 du	31638 trips
Shopping Center	67.0	209 ksf	14009 trips	209 ksf	14009 trips	0 ksf	0 trips
Retail/Service	40.0	778 ksf	31102 trips	1483 ksf	59329 trips	706 ksf	28227 trips
Hotel/Motel/Tourist	12.0	0 ksf	0 trips	0 ksf	0 trips	0 ksf	0 trips
Business Park	10.8	458 ksf	4944 trips	1504 ksf	16245 trips	1046 ksf	11301 trips
Business Park-Off/Retail	20.0	0 ksf	0 trips	3366 ksf	67320 trips	3366 ksf	67320 trips
Mixed Comm'l/Residential	25.0	0 ksf	0 trips	480 ksf	11990 trips	480 ksf	11990 trips
Local Park	8.0	0 ac	0 trips	78 ac	624 trips	78 ac	624 trips
Regional Park/Rec	8.0	0 ac	0 trips	0 ac	0 trips	0 ac	0 trips
School	35.0	365 ksf	12775 trips	365 ksf	12775 trips	0 ksf	0 trips
Government Office	25.0	0 ksf	0 trips	0 ksf	0 trips	0 ksf	0 trips
Transportation	0.0	149 ac	0 trips	223 ac	0 trips	74 ac	0 trips
Commercial Recreation	10.0	25 ac	250 trips	29 ac	290 trips	4 ac	40 trips
Open Water	0.0	15 ac	0 trips	15 ac	0 trips	0 ac	0 trips
TOTAL NONRESIDENTIAL		1444 ksf	63080 trips	7042 ksf	182582 trips	5598 ksf	119502 trips
TOTAL			112658 trips		263798 trips		151140 trips
AGOURA HILLS STUDY AREA							
TRIP GENERATION							
LAND USE	trips per unit	-----Existing Use-----		-----Proposed Plan-----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	10.0	1917 du	19170 trips	5492 du	54920 trips	3575 du	35750 trips
Resid-Medium (7-15/ac)	8.0	722 du	5776 trips	1980 du	15840 trips	1258 du	10064 trips
Resid-High (16-35/ac)	6.0	0 du	0 trips	0 du	0 trips	0 du	0 trips
Open Space	9.0	0 du	0 trips	496 du	4464 trips	496 du	4464 trips
TOTAL RESIDENTIAL		2639 du	24946 trips	7968 du	75224 trips	5329 du	50278 trips
Shopping Center	67.0	0 ksf	0 trips	0 ksf	14009 trips	0 ksf	14009 trips
Retail/Service	40.0	59 ksf	2352 trips	594 ksf	23760 trips	535 ksf	21408 trips
Hotel/Motel/Tourist	12.0	0 ksf	0 trips	0 ksf	0 trips	0 ksf	0 trips
Business Park	10.8	0 ksf	0 trips	1481 ksf	15995 trips	1481 ksf	15995 trips
Business Park-Off/Retail	20.0	0 ksf	0 trips	0 ksf	0 trips	0 ksf	0 trips
Mixed Comm'l/Residential	25.0	0 ksf	0 trips	0 ksf	0 trips	0 ksf	0 trips
Local Park	8.0	0 ac	0 trips	0 ac	0 trips	0 ac	0 trips
Regional Park/Rec	8.0	0 ac	0 trips	3965 ac	31720 trips	3965 ac	31720 trips
School	35.0	160 ac	5600 trips	165 ac	5775 trips	5 ac	175 trips
Government Office	25.0	11 ksf	275 trips	11 ksf	275 trips	0 ksf	0 trips
Transportation	0.0	77 ac	0 trips	95 ac	0 trips	18 ac	0 trips
Commercial Recreation	10.0	0 ac	0 trips	55 ac	550 trips	55 ac	550 trips
Open Water	0.0	52 ac	0 trips	52 ac	0 trips	0 ac	0 trips
TOTAL NONRESIDENTIAL		70 ksf	8227 trips	2086 ksf	92084 trips	2016 ksf	83857 trips
TOTAL			33173 trips		167308 trips		134135 trips



Mitigation  
Measure

To mitigate the identified deficiencies within the study area and improve traffic flow, a number of traffic improvements and transportation system management measures are recommended for the Plan.

1. Widen Agoura Road to four lanes and realign the roadway with Reyes Adobe Road. This measure is currently being studied.
2. Connection of Thousand Oaks Boulevard and Driver to form a continuous arterial with signalization, signage and right-of-way improvements to serve as an efficient arterial connecting Kanan Road and Chesebro Road with minimum impact on existing land uses.
3. Extension of arterials to improve and serve existing and projected traffic volumes including Agoura Road and Driver and freeway crossings at Reyes Adobe Road and Chesebro Road.
4. Improvement of freeway ramps and frontage roads at Kanan Road, Reyes Adobe Road and Chesebro Road.
5. Encouragement of Park-and-Ride facilities where appropriate in such locations as underutilized freeway right-of-ways and other locations convenient for bus access.
6. Requirement of dedication right-of-ways for bicycle routes and major trail system elements by developments.





### 3.13 Public Utilities, Facilities and Services

#### Environmental Setting

The City is now served by most of the infrastructure elements required for urban development. The level of facilities and services provided is in general designed to support the current level of population and current developed area. In general, requirements for services are expected to increase proportionally to population, and no unusual or significant problems providing this additional service are anticipated. Service systems where most significant costs are anticipated and major capital improvements required are sewage treatment and water supply systems.

Public facilities and services assumed to be required to grow roughly proportionally to population with no significant problems in delivering services at the current level include the following:

#### Law Enforcement

The Los Angeles County Sheriff's Department provides general law enforcement and investigative services to the study area and the California Highway Patrol provides traffic control. The Malibu Sheriff Station serves the study area and is located at 23555 Civic Center Way in Malibu. There is also a satellite station just north of the Ventura Freeway at Lost Hills Road. This facility provides desk service, including taking reports, fingerprinting, and issuing bicycle licenses.

The Malibu Sheriff Station is located twelve miles from the study area. Because of this distance and the geography of the Santa Monica Mountains area, i.e., the rugged terrain and narrow winding roads, extended response times are sometimes encountered.

Service delivery is based on demand. New development, with its accompanying population increases, affects the demand for service. The system is designed to be flexible and adjustments are made in relation to the availability of patrol cars. The desired patrol car per population ratio varies from district to district with no one ratio considered ideal; societal groupings and geographic peculiarities are the most common measures used in formulating an effective ratio.

The 1981 Malibu/Santa Monica Mountains Area Plan of the Los Angeles County General Plan found a need for a sheriff's facility in the Las Virgenes area. In response to this and other findings, a new sheriff's station is planned for the study area. This station is to be located south of the Ventura Freeway on Lost Hills Road just east of the study area. The projected completion date for this facility is not definite at this time. Construction of this facility should alleviate current service delivery problems of extended response times.



Fire Protection      Fire protection for the City of Agoura Hills is provided by the County of Los Angeles (fire hazards are discussed in Section 3.9, on page 77). The Los Angeles County Fire Department provides fire prevention, fire protection and emergency medical services. The Prevention and Conservation Bureau provides plan checking which includes subdivisions, access and water requirements, technical expertise in fire prevention matters and availability of foresters for environmental issues.

There are two fire stations in the study area:

<u>Station</u>	<u>Location</u>	<u>Capabilities</u>
#65	4206 N. Cornell Rd., Agoura Hills	Engine company and patrol with a 24-hour on-duty strength of 4 people
#125	5215 N. Las Virgenes Rd., Calabasas	2 engine companies and a paramedic squad with an on-duty strength of 8 people

Additional fire protection services are provided by the entire Los Angeles County Fire Department for major fire emergencies such as brush fires. For severe and widespread fire emergencies, State Department of Forestry crews can also be called.

Fire department service levels are based on nationally-recognized standards established by the Insurance Service Organization and the National Fire Protection Association. Impact on the existing service levels are measured by monitoring the number of emergency calls, both fire and emergency medical; monitoring the number of commercial and industrial occupancies which require inspection by fire department personnel; and monitoring fire protection needs by response distances and required fire flow.

Factors that will influence additional demands for fire protection services as increased development occurs include: the mix of uses, intensity of development, access, response distances, vegetation clearance, architectural design planting practices and levels of activity. (City of Westlake Village Draft General Plan and Integrated EIR, p. II-41)

There are currently no problems with service delivery and no specific expansions scheduled at this time. In addition to the fire minimization measures listed under fire hazards (p. 79), the following mitigation measures are provided: enactment of a fire resistant roof ordinance, enactment of a smoke detector ordinance,



provision of new fire protection facilities by developers and a hazard reduction program.

Telephone      On January 1 of 1984, there was a divestiture between AT&T and Pacific Telephone. AT&T is currently responsible for long distance, the zero operator and telephone service that existed prior to the divestiture. Pacific Bell provides dialtone service (e.g., the 411 operator) and other special services (e.g., call forwarding). This means that frequently both companies will be used during a single telephone call.

Pacific Bells' central office serving the study area is located at 29300 West Roadside Drive. The closest service center for telephone purchase, etc. is located at 20844 Ventura Boulevard in Woodland Hills.

Several years ago, Pacific Telephone did a study on anticipated growth from the west San Fernando area out to Agoura and found that this growth would be substantial. As a result of this study, future growth in the Agoura area has already been planned for by Pacific Bell and no problems are expected with telephone service delivery.

Cable Television      Cable is provided to portions of the study by Storer Cable located at 30901 Agoura Road in Westlake Village. Their service area encompasses the area around the Ventura Freeway and excludes the Malibu Lake and Cornell Road area as well as Morrison Ranch. The cable system has a 30 channel capacity and carries off-air network, independent stations, major satellite programs and several premium stations. The company plans to expand into new development areas which are within their franchise area and are contiguous with the present system.

Animal Control      The Los Angeles County Department of Animal Care and Control provides animal control services to the Agoura Hills area. Shelter #7, located at 29525 Agoura Road in Agoura Hills, provides veterinary care for injured birds and wildlife as well as impounding stray dogs and cats. Infrequently, there are overcrowding problems at the facility; however, the current capacity of the facility is usually adequate.

Medical  
Facilities      Several medical facilities are located in the City of Agoura Hills. The Agoura Hills Urgent Care Center opened May 12, 1983, and is located at 29525 Canwood Street. This private facility serves the entire Agoura area. By definition an urgent care facility handles cases that are not life threatening, i.e., cases where the patient can walk in the door and walk out after treatment.





Agoura Oaks Medical Centers I and II are located at 28222 Agoura Road and 28240 Agoura Road, respectively. The centers house a variety of medical specialists including dentists, neurologists, podiatrists and surgeons. Both centers were completed in 1981 and are mainly local serving. The developer of medical centers has plans for development of a third center as well as a convalescent hospital.

The closest hospital to the City of Agoura Hills is the Westlake Community Hospital at 4415 Lakeview Canyon Road in Westlake Village. Long-term health care services are provided at facilities in Newbury Park and Thousand Oaks, Ventura Estates Health Manor, Mary Health Convalescent Hospital and the Thousand Oaks Convalescent Hospital. The Tarzana Medical Center in the west San Fernando Valley provides neonatal intensive care unit facilities.

**Libraries** The Las Virgenes Library, a branch of the Los Angeles County library system, is located at 29130 Roadside Road in Agoura Hills. It serves the Agoura Hills area as well as the Oak Park community and parts of Westlake Village and Thousand Oaks. This 7500 square foot facility contains 50,000 to 55,000 volumes with average circulation of 15,000 to 20,000 books per month.

The public library offers many services, including: loaning books (including large print books), magazines, pamphlets, 16mm films, cassette tapes (including books-on-tape), and audio discs; providing information and referral (reference) service; providing film programs for children and adults, children's puppet shows, arts and crafts, dance, theater, and storytimes; renting video games; maintaining a continuous sale of used books; supplying a public photocopier (charge); maintaining a microfiche-microfilm reader-printer (free); and housing local history materials for public use.

The City of Thousand Oaks Library at 1401 East Janss Road also serves Agoura Hills residents. The library's circulation is estimated to be 40,000-50,000 books and periodicals per month and about 40,000 persons use the facility monthly. The Agoura High School library at 28545 West Driver Avenue in the City is used primarily by the student population with very little citywide use.

The Las Virgenes Library, Agoura's major facility, was built in 1970 to accommodate a loan circulation of approximately 7,500 items per month -- current circulation is double the original 7,500 circulation accommodation and is continuing to increase. Several problems have arisen because of heavy library useage in Agoura Hills. There is not adequate space for library





materials, studying and community and children's programs.

The Los Angeles County Public Library recognizes these space constraints and has estimated that the area should have a 20,000 square foot facility; however, there are no County funds available for new libraries, so there are no current plans for expansion.

#### Electricity

The Southern California Edison Company provides electricity to Agoura Hills and the remainder of the study area.

Based on system-wide growth rate projections, Edison can now provide electrical service to meet demand throughout the 1980's. The Company is currently planning new construction of electrical facilities to meet anticipated demand over the next 25 years.

Since electrical demand is currently being met and the company has plans to meet future demand, there are no current or anticipated problems with service delivery. However, if total system demand for electricity exceeds the Edison estimates, shortages may arise.

Below is a table which shows projected electricity demand for the proposed project:

#### CITY OF AGOURA HILLS ELECTRIC POWER CONSUMPTION

TABLE 19  
PROJECTED ELECTRICITY DEMAND

LAND USE	mwh per unit	-----Existing Use-----		---Proposed Project---		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	0.016	4326 du	69 mwh	6363 du	101 mwh	2037 du	32 mwh
Resid-Medium (7-15/ac)	0.016	738 du	12 mwh	1692 du	27 mwh	954 du	15 mwh
Resid-High (16-35/ac)	0.016	69 du	1 mwh	324 du	5 mwh	255 du	4 mwh
Open Space	0.016	0 du	0 mwh	234 du	4 mwh	234 du	4 mwh
<b>TOTAL RESIDENTIAL</b>		<b>5133 du</b>	<b>82 mwh</b>	<b>8613 du</b>	<b>137 mwh</b>	<b>3480 du</b>	<b>55 mwh</b>
Shopping Center	0.034	209 ksf	7 mwh	209 ksf	7 mwh	0 ksf	0 mwh
Retail/Service	0.034	778 ksf	26 mwh	1483 ksf	50 mwh	706 ksf	24 mwh
Hotel/Motel/Tourist	0.035	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Business Park	0.049	458 ksf	22 mwh	1504 ksf	73 mwh	1046 ksf	51 mwh
Business Park-Off/Retail	0.042	0 ksf	0 mwh	3366 ksf	141 mwh	3366 ksf	141 mwh
Mixed Comm'l/Residential	0.025	0 ksf	0 mwh	480 ksf	12 mwh	480 ksf	12 mwh
Local Park	0.010	0 ac	0 mwh	78 ac	1 mwh	78 ac	1 mwh
Regional Park/Rec	0.010	0 ac	0 mwh	0 ac	0 mwh	0 ac	0 mwh
School	0.017	365 ac	6 mwh	365 ac	6 mwh	0 ac	0 mwh
Government Office	0.017	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Transportation	0.000	149 ac	0 mwh	223 ac	0 mwh	74 ac	0 mwh
Commercial Recreation	0.022	25 ac	1 mwh	29 ac	1 mwh	4 ac	0 mwh
Open Water	0.000	15 ac	0 mwh	15 ac	0 mwh	0 ac	0 mwh
<b>TOTAL NONRESIDENTIAL</b>		<b>1444 ksf</b>	<b>62 mwh</b>	<b>7042 ksf</b>	<b>291 mwh</b>	<b>5598 ksf</b>	<b>229 mwh</b>
<b>TOTAL</b>			<b>144 mwh</b>		<b>428 mwh</b>		<b>284 mwh</b>



TABLE 19, Con't

AGOURA HILLS STUDY AREA  
ELECTRIC POWER CONSUMPTION

LAND USE	mwh per unit	-----Existing Use-----		-----Proposed Project-----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	0.016	1917 du	30 mwh	5492 du	87 mwh	3575 du	57 mwh
Resid-Medium (7-15/ac)	0.016	722 du	11 mwh	1980 du	31 mwh	1258 du	20 mwh
Resid-High (16-35/ac)	0.016	0 du	0 mwh	0 du	0 mwh	0 du	0 mwh
Open Space	0.016	0 du	0 mwh	496 du	8 mwh	496 du	8 mwh
<b>TOTAL RESIDENTIAL</b>		<b>2639 du</b>	<b>42 mwh</b>	<b>7968 du</b>	<b>127 mwh</b>	<b>5329 du</b>	<b>85 mwh</b>
Shopping Center	0.034	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Retail/Service	0.034	59 ksf	2 mwh	594 ksf	20 mwh	535 ksf	18 mwh
Hotel/Motel/Tourist	0.035	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Business Park	0.049	0 ksf	0 mwh	1481 ksf	72 mwh	1481 ksf	72 mwh
Business Park-Off/Retail	0.042	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Mixed Comm'l/Residential	0.025	0 ksf	0 mwh	0 ksf	0 mwh	0 ksf	0 mwh
Local Park	0.010	0 ac	0 mwh	0 ac	0 mwh	0 ac	0 mwh
Regional Park/Rec	0.010	0 ac	0 mwh	3965 ac	40 mwh	3965 ac	40 mwh
School	0.017	160 ac	3 mwh	165 ac	3 mwh	5 ac	0 mwh
Government Office	0.017	11 ksf	0 mwh	11 ksf	0 mwh	0 ksf	0 mwh
Transportation	0.000	77 ac	0 mwh	95 ac	0 mwh	18 ac	0 mwh
Commercial Recreation	0.022	0 ac	0 mwh	55 ac	1 mwh	55 ac	1 mwh
Open Water	0.000	52 ac	0 mwh	52 ac	0 mwh	0 ac	0 mwh
<b>TOTAL NONRESIDENTIAL</b>		<b>70 ksf</b>	<b>5 mwh</b>	<b>2086 ksf</b>	<b>136 mwh</b>	<b>2016 ksf</b>	<b>131 mwh</b>
<b>TOTAL</b>			<b>47 mwh</b>		<b>263 mwh</b>		<b>216 mwh</b>

## Natural Gas

Natural gas is provided by the Southern California Gas Company to the entire study area. As a public utility, Southern California Gas Company is required by law to provide service to any development within its legally defined service area. The Company is under the jurisdiction of the California Public Utilities Commission and can be affected by the actions of Federal regulatory agencies. Should these agencies take any action which affects gas supply or conditions under which gas is available, service would be provided in accordance with the policies and extension rules on file with the California Public Utilities Commission at the time contractual arrangements are made.

Gas service to the project could be provided from existing mains without any significant impact on the environment.

Below is a table which shows projected natural gas demand for the proposed project:



CITY OF AGOURA HILLS  
GAS CONSUMPTION

TABLE 20

LAND USE	kcf per unit	-----Existing Use-----		-----Proposed Project-----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	0.22	4326 du	966 kcf	6363 du	1421 kcf	2037 du	455 kcf
Resid-Medium (7-15/ac)	0.14	738 du	101 kcf	1692 du	231 kcf	954 du	130 kcf
Resid-High (16-35/ac)	0.13	69 du	9 kcf	324 du	42 kcf	255 du	33 kcf
Open Space	0.20	0 du	0 kcf	234 du	47 kcf	234 du	47 kcf
TOTAL RESIDENTIAL		5133 du	1076 kcf	8613 du	1741 kcf	3480 du	665 kcf
Shopping Center	0.10	209 ksf	20 kcf	209 ksf	20 kcf	0 ksf	0 kcf
Retail/Service	0.10	778 ksf	75 kcf	1483 ksf	143 kcf	706 ksf	68 kcf
Hotel/Motel/Tourist	0.16	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Business Park	0.10	458 ksf	44 kcf	1504 ksf	143 kcf	1046 ksf	100 kcf
Business Park-Off/Retail	0.10	0 ksf	0 kcf	3366 ksf	321 kcf	3366 ksf	321 kcf
Mixed Comm'l/Residential	0.12	0 ksf	0 kcf	480 ksf	58 kcf	480 ksf	58 kcf
Local Park	0.13	0 ac	0 kcf	78 ac	10 kcf	78 ac	10 kcf
Regional Park/Rec	0.13	0 ac	0 kcf	0 ac	0 kcf	0 ac	0 kcf
School	0.10	365 ac	37 kcf	365 ac	37 kcf	0 ac	0 kcf
Government Office	0.10	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Transportation	0.00	149 ac	0 kcf	223 ac	0 kcf	74 ac	0 kcf
Commercial Recreation	0.11	25 ac	3 kcf	29 ac	3 kcf	4 ac	0 kcf
Open Water	0.00	15 ac	0 kcf	15 ac	0 kcf	0 ac	0 kcf
TOTAL NONRESIDENTIAL		1444 ksf	178 kcf	7042 ksf	735 kcf	5598 ksf	557 kcf
TOTAL			1254 kcf		2476 kcf		1222 kcf

AGOURA HILLS STUDY AREA  
GAS CONSUMPTION

LAND USE	kcf per unit	-----Existing Use-----		-----Proposed Project-----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	0.22	1917 du	428 kcf	5492 du	1227 kcf	3575 du	798 kcf
Resid-Medium (7-15/ac)	0.14	722 du	99 kcf	1980 du	271 kcf	1258 du	172 kcf
Resid-High (16-35/ac)	0.13	0 du	0 kcf	0 du	0 kcf	0 du	0 kcf
Open Space	0.20	0 du	0 kcf	496 du	99 kcf	496 du	99 kcf
TOTAL RESIDENTIAL		2639 du	527 kcf	7968 du	1596 kcf	5329 du	1070 kcf
Shopping Center	0.10	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Retail/Service	0.10	59 ksf	6 kcf	594 ksf	57 kcf	535 ksf	52 kcf
Hotel/Motel/Tourist	0.16	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Business Park	0.10	0 ksf	0 kcf	1481 ksf	141 kcf	1481 ksf	141 kcf
Business Park-Off/Retail	0.10	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Mixed Comm'l/Residential	0.12	0 ksf	0 kcf	0 ksf	0 kcf	0 ksf	0 kcf
Local Park	0.13	0 ac	0 kcf	0 ac	0 kcf	0 ac	0 kcf
Regional Park/Rec	0.13	0 ac	0 kcf	3965 ac	515 kcf	3965 ac	515 kcf
School	0.10	160 ac	16 kcf	165 ac	17 kcf	5 ac	1 kcf
Government Office	0.10	11 ksf	1 kcf	11 ksf	1 kcf	0 ksf	0 kcf
Transportation	0.00	77 ac	0 kcf	95 ac	0 kcf	18 ac	0 kcf
Commercial Recreation	0.11	0 ac	0 kcf	55 ac	6 kcf	55 ac	6 kcf
Open Water	0.00	52 ac	0 kcf	52 ac	0 kcf	0 ac	0 kcf
TOTAL NONRESIDENTIAL		70 ksf	23 kcf	2086 ksf	738 kcf	2016 ksf	715 kcf
TOTAL			550 kcf		2334 kcf		1784 kcf





Solid Waste      The Hillside Rubbish Company and the Las Virgenes Disposal Company provide refuse collection to Agoura residents and businesses. Hillside Rubbish Company provides over 90 percent of the service, with the Las Virgenes Disposal Company providing service to the remainder of the area. There are no current or expected problems in meeting development demands.

Solid waste is hauled by the two trash collecting companies to the Calabasas Landfill which is owned and operated by the Los Angeles County Sanitation District. Most of the refuse brought to the site comes from the western portion of the Santa Monica Mountains, although certain wastes come from as far away as the harbor area and the San Joaquin Valley. The 260-acre landfill is located at 26919 Ventura Boulevard in Agoura Hills.

Prior to July of 1980, the Calabasas Landfill was operated as a hazardous waste disposal site (Class I). Hazardous waste disposal was discontinued because the geology of the site did not meet the new state standards for hazardous waste disposal. Since that time, the landfill has operated as a Class II facility, accepting municipal, commercial and industrial wastes.

The Calabasas landfill currently receives approximately 2,000 tons per day. In approximately eleven years the current facility will reach capacity. Currently, the Los Angeles County Sanitation District is applying to increase the unused capacity by expanding the landfill into an adjacent canyon on the District's property. The expansion will provide an additional 9-14 years of capacity.

Below is a table which shows solid waste generation for the proposed project:



CITY OF AGOURA HILLS  
SOLID WASTE GENERATION

TABLE 21

LAND USE	lbs per unit	-----Existing Use-----		----Proposed Plan----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	9.8	4326 du	42395 lbs	6363 du	62357 lbs	2037 du	19963 lbs
Resid-Medium (7-15/ac)	5.0	738 du	3690 lbs	1692 du	8460 lbs	954 du	4770 lbs
Resid-High (16-35/ac)	3.5	69 du	242 lbs	324 du	1134 lbs	255 du	893 lbs
Open Space	7.9	0 du	0 lbs	234 du	1849 lbs	234 du	1849 lbs
TOTAL RESIDENTIAL		5133 du	46326 lbs	8613 du	73800 lbs	3480 du	27474 lbs
Shopping Center	14.9	209 ksf	3115 lbs	209 ksf	3115 lbs	0 ksf	0 lbs
Retail/Service	14.9	778 ksf	11585 lbs	1483 ksf	22100 lbs	706 ksf	10515 lbs
Hotel/Motel/Tourist	20.9	0 ksf	0 lbs	0 ksf	0 lbs	0 ksf	0 lbs
Business Park	29.7	458 ksf	13597 lbs	1504 ksf	44675 lbs	1046 ksf	31078 lbs
Business Park-Off/Retail	22.3	0 ksf	0 lbs	3366 ksf	75062 lbs	3366 ksf	75062 lbs
Mixed Comm'l/Residential	10.0	0 ksf	0 lbs	480 ksf	4796 lbs	480 ksf	4796 lbs
Local Park	100.0	0 ac	0 lbs	78 ac	7800 lbs	78 ac	7800 lbs
Regional Park/Rec	100.0	0 ac	0 lbs	0 ac	0 lbs	0 ac	0 lbs
School	14.9	365 ksf	5439 lbs	365 ksf	5439 lbs	0 ksf	0 lbs
Government Office	14.9	0 ksf	0 lbs	0 ksf	0 lbs	0 ksf	0 lbs
Transportation	0.0	149 ac	0 lbs	223 ac	0 lbs	74 ac	0 lbs
Commercial Recreation	125.0	25 ac	3125 lbs	29 ac	3625 lbs	4 ac	500 lbs
Open Water	0.0	15 ac	0 lbs	15 ac	0 lbs	0 ac	0 lbs
TOTAL NONRESIDENTIAL		1444 ksf	36861 lbs	7042 ksf	166611 lbs	5598 ksf	129750 lbs
TOTAL			83187 lbs		240411 lbs		157224 lbs

AGOURA HILLS STUDY AREA  
SOLID WASTE GENERATION

LAND USE	lbs per unit	-----Existing Use-----		----Proposed Plan----		-----Change-----	
		Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	9.8	1917 du	18787 lbs	5492 du	53822 lbs	3575 du	35035 lbs
Resid-Medium (7-15/ac)	5.0	722 du	3610 lbs	1980 du	9900 lbs	1258 du	6290 lbs
Resid-High (16-35/ac)	3.5	0 du	0 lbs	0 du	0 lbs	0 du	0 lbs
Open Space	7.9	0 du	0 lbs	496 du	3918 lbs	496 du	3918 lbs
TOTAL RESIDENTIAL		2639 du	22397 lbs	7968 du	67640 lbs	5329 du	45243 lbs
Shopping Center	14.9	0 ksf	0 lbs	0 ksf	3115 lbs	0 ksf	3115 lbs
Retail/Service	14.9	59 ksf	876 lbs	594 ksf	8851 lbs	535 ksf	7974 lbs
Hotel/Motel/Tourist	20.9	0 ksf	0 lbs	0 ksf	0 lbs	0 ksf	0 lbs
Business Park	29.7	0 ksf	0 lbs	1481 ksf	43986 lbs	1481 ksf	43986 lbs
Business Park-Off/Retail	22.3	0 ksf	0 lbs	0 ksf	0 lbs	0 ksf	0 lbs
Mixed Comm'l/Residential	10.0	0 ksf	0 lbs	0 ksf	0 lbs	0 ksf	0 lbs
Local Park	100.0	0 ac	0 lbs	0 ac	0 lbs	0 ac	0 lbs
Regional Park/Rec	100.0	0 ac	0 lbs	3965 ac	396500 lbs	3965 ac	396500 lbs
School	14.9	160 ac	2384 lbs	165 ac	2459 lbs	5 ac	75 lbs
Government Office	14.9	11 ksf	164 lbs	11 ksf	164 lbs	0 ksf	0 lbs
Transportation	0.0	77 ac	0 lbs	95 ac	0 lbs	18 ac	0 lbs
Commercial Recreation	125.0	0 ac	0 lbs	55 ac	6875 lbs	55 ac	6875 lbs
Open Water	0.0	52 ac	0 lbs	52 ac	0 lbs	0 ac	0 lbs
TOTAL NONRESIDENTIAL		70 ksf	3424 lbs	2086 ksf	461949 lbs	2016 ksf	45825 lbs
TOTAL			25821 lbs		529589 lbs		503768 lbs



Siting of sanitary landfills has become an increasingly difficult task in the last few years. In providing an environmentally safe site for disposal of wastes from the City of Agoura Hills as well as most of the County of Los Angeles, the Districts have encountered problems in siting new landfills and in expanding existing landfills in the last few years. New transfer stations which are used to economically facilitate disposal of wastes at distant landfills are also difficult to site. It is anticipated that this regional problem will continue.

#### Schools

The Las Virgenes Unified School District encompasses the Agoura Hills study area. The District contains seven elementary schools, two middle schools and two high schools, all of which serve the study area except White Oak Elementary in Westlake Village, Round Meadow Elementary in Hidden Hills and Chaparral Elementary in Calabasas. Enrollment district-wide in December of 1983 was 7,604 students. Pierce College, located in Woodland Hills, also serves the study area.

The Las Virgenes Unified School District has determined student enrollment generation as a function of dwelling unit type. Anticipated student enrollment is as follows:

<u>Condo/Townhouse/Apts.</u>		<u>Conventional Single Family</u>
K-5	.116	.41
6-8	.08	.25
9-12	.08	.20
	<u>.276</u>	<u>.86</u>

(Source: Las Virgenes Unified School District Master Plan, revised 11/8/82.)

For each condo/townhouse/apartment, the anticipated enrollment will be .276 students distributed among the grade divisions of K-5, 6-8 and 9-12 as .116, .08 and .08, respectively. For each conventional single-family unit, the anticipated student generation is much higher, as shown above.

The District has completed enrollment projections based on the population projections of the Malibu/Santa Monica Mountains Plan. Enrollment projections for schools that serve the study area are presented below:





TABLE 22

## TWENTY YEAR PLAN ENROLLMENT PROJECTIONS

<u>School</u>	<u>Type</u>	<u>Present Enrollment</u>	<u>To Be Housed (excess growth over capacity)</u>	<u># of Additional classrooms needed</u>
1. Yerba Buena	Elementary	403	398	13.2
2. Willow	Elementary	379	1,126	37.5
3. Sumac	Elementary	411	849	28.3
4. Lupin Hill	Elementary	371	768	25.6
5. Lindero	Middle	1,152	1,158	41.3
6. A. E. Wright	Middle	933	1,477	52.7
7. Agoura	High	1,541	609	21.7
8. Calabasas	High	<u>1,397</u>	<u>217</u>	<u>7.7</u>
TOTAL		6,587	6,602	228.0

Source: Las Virgenes Unified School District, Master Plan, Revised 11/8/82.

Because of the growth that the Las Virgenes area has experienced, the District qualifies as an overcrowded district, which makes it eligible to take advantage of County Ordinance No. 11810 (State Law - SB 201). This ordinance requires developers of housing units to be assessed fees by the school district in order to provide temporary classroom space to alleviate overcrowding produced from new students entering the district. In subdivisions that include 50 dwellings or more, the school district may decide that a dedication of land can be used instead of fees. This payment of fees and/or dedication of land is a prerequisite to the issuance of any building permit to a developer. These funds are currently being used to provide interim facilities (portable buildings) at a number of locations within the District, most notably Willow School and Lindero Canyon Middle School.

Sewer The Las Virgenes Water District serves the study area. The Los Angeles County Engineer provides 1) service to collector sewers which connect with the District's trunk sewer network; 2) industrial waste inspection; and 3) permits to connect to the sewage system.



Sewage is pumped to the Tapia Water Reclamation Plant in Malibu Canyon which is owned by a joint powers agreement with the Triunfo County Sanitation District and the Las Virgenes Municipal Water District. Plant capacity is 8.0 MGD with 5.0 MGD current flows. Of that 1.7 MGD is from the Triunfo District and 3.3 is from the Las Virgenes Water District (Oak Park Community Plan, EIR Supplement, p. 60). The system is currently underutilized and current capacity will probably be reached by 1990-1992.

In addition to the Tapia facility, there are on-site individual disposal systems relying on septic tanks, leach fields and pits. In the Agoura area, some large land parcels and some areas in Old Agoura are served by individual sewage systems. Individual septic systems will be used less in the study area in the future for both environmental and economic reasons.

As development increases, a public sewage system will become economically viable for most of the development areas in the City. The use of septic tanks in the study area is constrained by the soil limitations for septic tank filter fields. The Soil Conservation Service has rated that limitation as severe for over 90% of the study area and an even greater percentage for the City alone.

Sewage treatment facility expansion is based on the cumulative population projections for the entire area served by the District. In 1978, the SCAG Growth Forecast Policy predicted that by the year 2000 the forecasted wastewater flows would exceed existing (1976) treatment capacity. Existing capacity will probably be reached by 1990. In addition to impacts on the capacity of the sewage system with increased development, impacts from septic tank failures also occur and will increase with development in remote areas that cannot be economically served by a public sewer system. (For a further discussion of the impacts of septic system failure, see Section 3.3, Water Quality.)

Below is a table which shows sewage generation for the proposed project:



CITY OF AGOURA HILLS  
SEWER AVERAGE FLOW

TABLE 23

LAND USE	gal/day	-----Existing Use-----		----Proposed Plan----		-----Change-----	
	per unit	Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	350.0	4326 du	1514100 gal/day	6363 du	2227050 gal/day	2037 du	712950 gal/day
Resid-Medium (7-15/ac)	200.0	738 du	147600 gal/day	1692 du	338400 gal/day	954 du	190800 gal/day
Resid-High (16-35/ac)	200.0	69 du	13800 gal/day	324 du	64800 gal/day	255 du	51000 gal/day
Open Space	295.0	0 du	0 gal/day	234 du	69030 gal/day	234 du	69030 gal/day
TOTAL RESIDENTIAL		5133 du	1675500 gal/day	8613 du	2699280 gal/day	3480 du	1023780 gal/day
Shopping Center	100.0	209 ksf	20909 gal/day	209 ksf	20909 gal/day	0 ksf	0 gal/day
Retail/Service	100.0	778 ksf	77755 gal/day	1483 ksf	148322 gal/day	706 ksf	70567 gal/day
Hotel/Motel/Tourist	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Business Park	200.0	458 ksf	91560 gal/day	1504 ksf	300840 gal/day	1046 ksf	209280 gal/day
Business Park-Off/Retail	175.0	0 ksf	0 gal/day	3366 ksf	589050 gal/day	3366 ksf	589050 gal/day
Mixed Comm'l/Residential	150.0	0 ksf	0 gal/day	480 ksf	71940 gal/day	480 ksf	71940 gal/day
Local Park	500.0	0 ac	0 gal/day	78 ac	39000 gal/day	78 ac	39000 gal/day
Regional Park/Rec	500.0	0 ac	0 gal/day	0 ac	0 gal/day	0 ac	0 gal/day
School	200.0	365 ksf	73000 gal/day	365 ksf	73000 gal/day	0 ksf	0 gal/day
Government Office	200.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Transportation	0.0	149 ac	0 gal/day	223 ac	0 gal/day	74 ac	0 gal/day
Commercial Recreation	300.0	25 ac	7500 gal/day	29 ac	8700 gal/day	4 ac	1200 gal/day
Open Water	0.0	15 ac	0 gal/day	15 ac	0 gal/day	0 ac	0 gal/day
TOTAL NONRESIDENTIAL		1444 ksf	270723 gal/day	7042 ksf	1251761 gal/day	5598 ksf	981037 gal/day
TOTAL			1946223 gal/day		3951041 gal/day		2004817 gal/day
AGOURA HILLS STUDY AREA							
SEWER AVERAGE FLOW							

LAND USE	gal/day	-----Existing Use-----		----Proposed Plan----		-----Change-----	
	per unit	Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	350.0	1917 du	670950 gal/day	5492 du	1922200 gal/day	3575 du	1251250 gal/day
Resid-Medium (7-15/ac)	200.0	722 du	144400 gal/day	1980 du	396000 gal/day	1258 du	251600 gal/day
Resid-High (16-35/ac)	200.0	0 du	0 gal/day	0 du	0 gal/day	0 du	0 gal/day
Open Space	295.0	0 du	0 gal/day	496 du	146320 gal/day	496 du	146320 gal/day
TOTAL RESIDENTIAL		2639 du	815350 gal/day	7968 du	2464520 gal/day	5329 du	1649170 gal/day
Shopping Center	100.0	0 ksf	0 gal/day	0 ksf	20909 gal/day	0 ksf	20909 gal/day
Retail/Service	100.0	59 ksf	5881 gal/day	594 ksf	59400 gal/day	535 ksf	53519 gal/day
Hotel/Motel/Tourist	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Business Park	200.0	0 ksf	0 gal/day	1481 ksf	296200 gal/day	1481 ksf	296200 gal/day
Business Park-Off/Retail	175.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Mixed Comm'l/Residential	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Local Park	500.0	0 ac	0 gal/day	0 ac	0 gal/day	0 ac	0 gal/day
Regional Park/Rec	500.0	0 ac	0 gal/day	3965 ac	1982500 gal/day	3965 ac	1982500 gal/day
School	200.0	160 ac	32000 gal/day	165 ac	33000 gal/day	5 ac	1000 gal/day
Government Office	200.0	11 ksf	2200 gal/day	11 ksf	2200 gal/day	0 ksf	0 gal/day
Transportation	0.0	77 ac	0 gal/day	95 ac	0 gal/day	18 ac	0 gal/day
Commercial Recreation	300.0	0 ac	0 gal/day	55 ac	16500 gal/day	55 ac	16500 gal/day
Open Water	0.0	52 ac	0 gal/day	52 ac	0 gal/day	0 ac	0 gal/day
TOTAL NONRESIDENTIAL		70 ksf	40081 gal/day	2086 ksf	2410709 gal/day	2016 ksf	2370628 gal/day
TOTAL			855431 gal/day		4875229 gal/day		4019798 gal/day





In response to area growth projections, a Draft Environmental Impact Report is currently being prepared to address the expansion of the Tapia facilities to 10 million gallons per day. This added capacity, however, will not be needed prior to the early 1990's.

Additionally, the District is currently undertaking a joint project with the Metropolitan Water District for the use of reclaimed water. This system will be used to deliver reclaimed water for irrigation and greenbelts. Currently, reclaimed water usage in the District's system is approximately 1000 acre feet per year. At full capacity, the expanded water reclamation system will accommodate 3600 acre feet a year.

Water The Metropolitan Water District is the supplier of domestic water to the Agoura Hills area, which receives its water primarily from the Colorado River, Owens River Valley and the State water project (Feather River Water). The Las Virgenes Municipal Water District is the water wholesaler for the Agoura Hills study area. The District operates an extensive network of water transmission mains, five pumping stations and a three million gallon tank in the Morrison development, which is currently under construction.

A water Master Plan to the year 1990 was completed by the District in 1981. The capital project improvements called for by the Plan will not solely benefit the study area; they are being constructed to insure an adequate supply of potable water to customers throughout the District. In the study area, these projects include the current construction of the Morrison tank and the expansion of the Cornell Pump Station.

Although the District will be able to meet development demands, the cost of water has risen greatly. In the last two years, there has been over a 60% increase in the price of water to District customers. A major component of this cost is the power costs to get the water from its source to the Agoura Hills area. This cost is expected to continue to rise. Another potential impact of increased development on the water supply is decreased water quality in the summer months. During this time, when water demand is at a peak, the Agoura Hills' water supply is supplemented by the Westlake Reservoir. To date, the top portion of the reservoir has been siphoned off in summer months. The reservoir contains quite a bit of algae, but it exists at lower levels. If increased levels of water from the reservoir were required, the potential decreased quality would pose health hazards.

Below is a table which shows projected water demand for the proposed project:



CITY OF AGOURA HILLS  
WATER CONSUMPTION

TABLE 24

LAND USE	gal/day	-----Existing Use-----		----Proposed Plan----		-----Change-----	
	per unit	Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	400.0	4326 du	1730400 gal/day	6363 du	2545200 gal/day	2037 du	814800 gal/day
Resid-Medium (7-15/ac)	250.0	738 du	184500 gal/day	1692 du	423000 gal/day	954 du	238500 gal/day
Resid-High (16-35/ac)	225.0	69 du	15525 gal/day	324 du	72900 gal/day	255 du	57375 gal/day
Open Space	343.0	0 du	0 gal/day	234 du	80262 gal/day	234 du	80262 gal/day
TOTAL RESIDENTIAL		5133 du	1930425 gal/day	8613 du	3121362 gal/day	3480 du	1190937 gal/day
Shopping Center	100.0	209 ksf	20909 gal/day	209 ksf	20909 gal/day	0 ksf	0 gal/day
Retail/Service	100.0	778 ksf	77755 gal/day	1483 ksf	148322 gal/day	706 ksf	70567 gal/day
Hotel/Motel/Tourist	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Business Park	200.0	458 ksf	91560 gal/day	1504 ksf	300840 gal/day	1046 ksf	209280 gal/day
Business Park-Off/Retail	150.0	0 ksf	0 gal/day	3366 ksf	504900 gal/day	3366 ksf	504900 gal/day
Mixed Comm'l/Residential	250.0	0 ksf	0 gal/day	480 ksf	119900 gal/day	480 ksf	119900 gal/day
Local Park	600.0	0 ac	0 gal/day	78 ac	46800 gal/day	78 ac	46800 gal/day
Regional Park/Rec	600.0	0 ac	0 gal/day	0 ac	0 gal/day	0 ac	0 gal/day
School	200.0	365 ksf	73000 gal/day	365 ksf	73000 gal/day	0 ksf	0 gal/day
Government Office	200.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Transportation	0.0	149 ac	0 gal/day	223 ac	0 gal/day	74 ac	0 gal/day
Commercial Recreation	350.0	25 ac	8750 gal/day	29 ac	10150 gal/day	4 ac	1400 gal/day
Open Water	0.0	15 ac	0 gal/day	15 ac	0 gal/day	0 ac	0 gal/day
TOTAL NONRESIDENTIAL		1444 ksf	271973 gal/day	7042 ksf	1224821 gal/day	5598 ksf	952847 gal/day
TOTAL AGOURA HILLS STUDY AREA			2202398 gal/day		4346183 gal/day		2143784 gal/day

LAND USE	gal/day	-----Existing Use-----		----Proposed Plan----		-----Change-----	
	per unit	Units	Total	Units	Total	Units	Total
Resid-Single (.05-6/ac)	400.0	1917 du	766800 gal/day	5492 du	2196800 gal/day	3575 du	1430000 gal/day
Resid-Medium (7-15/ac)	250.0	722 du	180500 gal/day	1980 du	495000 gal/day	1258 du	314500 gal/day
Resid-High (16-35/ac)	225.0	0 du	0 gal/day	0 du	0 gal/day	0 du	0 gal/day
Open Space	343.0	0 du	0 gal/day	496 du	170128 gal/day	496 du	170128 gal/day
TOTAL RESIDENTIAL		2639 du	947300 gal/day	7968 du	2861928 gal/day	5329 du	1914628 gal/day
Shopping Center	100.0	0 ksf	0 gal/day	0 ksf	20909 gal/day	0 ksf	20909 gal/day
Retail/Service	100.0	59 ksf	581 gal/day	594 ksf	59400 gal/day	535 ksf	53519 gal/day
Hotel/Motel/Tourist	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Business Park	200.0	0 ksf	0 gal/day	1481 ksf	296200 gal/day	1481 ksf	296200 gal/day
Business Park-Off/Retail	150.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Mixed Comm'l/Residential	250.0	0 ksf	0 gal/day	0 ksf	0 gal/day	0 ksf	0 gal/day
Local Park	600.0	0 ac	0 gal/day	0 ac	0 gal/day	0 ac	0 gal/day
Regional Park/Rec	600.0	0 ac	0 gal/day	3965 ac	2379000 gal/day	3965 ac	2379000 gal/day
School	200.0	160 ac	32000 gal/day	165 ac	33000 gal/day	5 ac	1000 gal/day
Government Office	200.0	11 ksf	2200 gal/day	11 ksf	2200 gal/day	0 ksf	0 gal/day
Transportation	0.0	77 ac	0 gal/day	95 ac	0 gal/day	18 ac	0 gal/day
Commercial Recreation	350.0	0 ac	0 gal/day	55 ac	19250 gal/day	55 ac	19250 gal/day
Open Water	0.0	2 ac	0 gal/day	2 ac	0 gal/day	0 ac	0 gal/day
TOTAL NONRESIDENTIAL		70 ksf	40081 gal/day	2086 ksf	2809959 gal/day	2016 ksf	2769878 gal/day
TOTAL			987381 gal/day		5671887 gal/day		4684506 gal/day



Several conservation measures can reduce the potential use of water by new developments, including:

Low-flush toilets (required by law)

Low-flow showers and faucets (required by law)

Insulation of hot water lines (required by law)

Reduce water pressure greater than 50 pounds per square inch (psi) to 50 psi or less by means of pressure reducing valve.

All hot water lines in dwelling should be insulated to provide hot water faster with less water waste, and to keep hot pipes from heating cold water pipes.

Water-conserving models of washers should be utilized.

Landscape with low water-consuming plants wherever feasible and provide controlled irrigation and moisture sensing devices for open space areas.

Minimize use of lawn by limiting it to lawn dependent uses, such as playing field.

Use mulch extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.





### 3.14 Fiscal Impact

#### Environmental Setting

The General Plan has a number of potential fiscal impacts on the City. The land use plan results in a mix of land uses which provide revenues to the City and require services and capital improvements. Policies of the general plan about phasing of development and funding of capital improvements can change the costs and revenues from these land uses to improve the fiscal balance of the City.

Because Agoura Hills is a new City, there is no easily reviewable record of previous budgets to determine revenues and service costs. The fiscal analysis that follows was based on 1) review of the 1983/84 Agoura Hills City Budget, 2) analysis of the City budgets of selected comparable cities and 3) discussions with officials from the City of Agoura Hills and the County of Los Angeles. The fiscal analysis below summarizes the conclusions of a fiscal impact report prepared by Williams-Kuebelbeck & Associates contained in a memorandum to City Manager Michael Huse, "Fiscal Impact of Agoura Hills General Plan Buildout", May 16, 1984.

#### Environmental Impact

The fiscal analysis indicates that the development plan proposed is expected to yield an operating budget surplus for both the City and the study area. At full development, the analysis projects a budget surplus of \$1.9 million per year for the City of Agoura Hills and \$0.3 million for the study area. For both areas, the most productive land use in terms of net revenue is commercial, and the least productive is residential. Institutional and industrial land uses also are expected to have negative impacts on the City and the study area.

In order to insure that capital costs are supported by development fees, it will be necessary to establish a system of development fees based on more detailed capital programming than was performed as part of the General Plan studies.

Capital costs which need to be covered by development fees include widening of arterial streets, improvement of local streets, freeway ramps and bridge improvements. In addition, water, sewer and flood control improvements required should be identified and funded through developer construction or development fees.

#### Market Value Projections

##### Property Value Projections (Tables 25-28)

Table 25 presents estimates of the current market value per acre of residential and non-residential property in Agoura Hills, for the purpose of property tax



projections. Residential property values were estimated through discussions with real estate brokers familiar with the local market. Office and industrial property values were estimated through a capitalization of constant net income streams, based on a survey of current lease rates in the City. Hotel/motel and retail property values were determined through a comparison of developments similar to those projected for Agoura Hills.

Tables 26 through 28 display projections of the total market value, in constant 1984 dollars, of taxable property within the City of Agoura Hills, the Study Area and the City and Study Area combined. Total market values were projected by applying the estimates of current market values per acre in Table 1 to the number of acres of each land use designated by the Agoura Hills General Plan. Based on the property value estimates, property tax revenues to the City's General Fund, as derived in Appendix Table A-5, would amount to \$1.8 million annually for property within the City and \$1.6 million annually for property within the Study Area.

#### Revenue and Cost Multipliers (Tables 29-30)

The derived average revenue and cost multipliers are presented in Tables 29 and 30. These multipliers were based on:

- o Discussions with the Agoura Hills City Manager with regard to potential changes in the budget categories of the Agoura Hills City Budget as build-out occurs, and an assessment of which services will continue on a contract basis with the County of Los Angeles.
- o Discussions with County officials to obtain methodologies for projecting the costs of contract services provided by the County, including police and fire protection, animal control, and various categories of public works.
- o Analysis of the 1983/84 Agoura Hills City Budget and comparison with the 1983/84 budgets of selected other cities to identify cost and revenue categories for which multipliers should be based on the current Agoura Hills budget, and categories for which multipliers are likely to change as growth occurs. The Cities of Thousand Oaks and Simi Valley in Ventura County were recommended by Agoura's City Manager as having comparable budgets to that expected for the City of Agoura Hills at build-out. In addition, the City of San Juan Capistrano in Orange County was selected for comparison because of its similarity in population, socioeconomic characteristics and land use to the City of Agoura Hills.



The units of measure upon which the cost and revenue multipliers are based vary according to which units or land areas are determined to be the primary revenue or cost generators. Per capita multipliers were used for those revenues and costs generated primarily by residential land uses. Population was considered a more appropriate base for projection than residential acreage, because of the variation in residential density between the City and Study Area and the overall low density of residential land use, particularly in the Study Area. Non-residential acre multipliers were used for the revenues and costs attributable to land uses other than residential.

#### Revenue and Expenditure Projections (Tables 31-32)

Tables 31 and 32 display projections of General Fund revenues and costs to the City of Agoura Hills resulting from the development of the City and the Study Area according to the General Plan. These projections were derived by applying the revenue and costs multipliers developed in Tables 31 and 32 to the population and land use projections contained in the General Plan. Separate projections were made for the revenues from property taxes, sales taxes and transient occupancy taxes, based on estimates of property values, taxable retail sales, and hotel/motel gross receipts, respectively.

#### Net Fiscal Impact (Table 33)

Table 33 provides a comparison of revenues and costs associated with General Plan build-out, revealing overall budget surpluses for both the City and Study Area. Table 33 also disaggregates total revenues and costs to the City according to land use, based upon each use's expected contribution as discussed above. An examination of Table 33 reveals that commercial land use is clearly the most productive, yielding large surplus revenues for both the City and Study Area. Residential land use is the least productive, resulting in a substantial budget deficit in each region. Institutional land use also consistently produces a negative fiscal impact. Finally, industrial land use produces slight budget deficits in both the City and Study Area.





Table 25

MARKET VALUES BY LAND USE  
 AGOURA HILLS  
 (in Constant 1984 Dollars)

<u>Land Use</u>	<u>Units Per Acre</u>	<u>Market Value Per Unit</u>	<u>Market Value Per Acre</u> (000's)
<u>Residential<sup>1/</sup></u>			
Rural	.1 du	\$1,000,000	\$ 100.0
Very Low	.6 du	530,000	318.0
Low	1.5 du	285,000	387.0
Single	4.0 du	190,000	760.0
Medium	10.5 du	125,000	1,312.0
High	25.0 du	90,000	2,250.0
Cluster	12.0 du	90,000	1,080.0
<u>Non-Residential<sup>2/</sup></u>			
Shopping Center <sup>3/</sup>	7,600 sf	\$140	\$1,064.0
Retail/Service <sup>4/</sup>	7,600 sf	130	988.0
Hotel/Motel <sup>5/</sup>	- sf	100	-
Business Park <sup>6/</sup>	14,500 sf	55	798.0
Business Park			
Office/Retail <sup>7/</sup>	25,000 sf	85	2,125.0
Mixed Commercial <sup>8/</sup>			
Residential	5,900 sf	130	767.0

<sup>1/</sup> Residential market values determined by survey of current market prices and discussions with real estate brokers in Agoura Hills.

<sup>2/</sup> Market values calculated through capitalization of constant net operating income streams. Assumes NNN leases, 5% deduction for collections and vacancies, and 10% capitalization rate.

<sup>3/</sup> Assumes lease rate of \$1.25 psf per month.

<sup>4/</sup> Assumes lease rate of \$1.15 psf per month.

<sup>5/</sup> Assumes nightly rate of \$55.00 per room, occupancy at 75%, operating expenses at 70%, and 450 sf per room.

<sup>6/</sup> See Table A-1 for industrial market value calculations.

<sup>7/</sup> Assumes one-half of acreage each industrial and office space; see Table A-2 for office market value calculations.

<sup>8/</sup> Assumes lease rate of \$1.15 psf per month.

Source: Williams-Kuebelbeck & Associates, Inc.



Table 26

MARKET VALUE PROJECTIONS  
CITY OF AGOURA HILLS  
(in Thousands of Constant 1984 Dollars)

<u>Land Use</u>	<u>Acres<sup>1/</sup></u>	<u>Total Market Value</u>
<u>Residential</u>		
Rural	191	\$ 19,100.0
Very Low	287	91,266.0
Low	174	67,338.0
Single	1,248	948,480.0
Medium	112	146,944.0
High	15	33,750.0
Cluster	<u>36</u>	<u>38,880.0</u>
Subtotal	2,063	\$1,345,758.0
<u>Non-Residential</u>		
Shopping Center	24	\$ 25,536.0
Retail/Service	193	190,684.0
Hotel/Motel	15	27,000.0
Business Park	103	82,194.0
Business Park/Office	135	286,875.0
Mixed Commercial/Residential	<u>82</u>	<u>62,894.0</u>
Subtotal	552	\$ 675,183.0
TOTAL	2,615	\$2,020,941.0

<sup>1/</sup> Based on Agoura Hills General Plan land use designations.

<sup>2/</sup> Assumes market value of \$100 psf (see Table 25), 450 sf per room, and total of 600 rooms.

Source: Table 25; Williams-Kuebelbeck & Associates, Inc.



Table 27  
 MARKET VALUE PROJECTIONS  
 AGOURA HILLS STUDY AREA  
 (in Thousands of Constant 1984 Dollars)

<u>Land Use</u>	<u>Acres<sup>1/</sup></u>	<u>Total Market Value</u>
<u>Residential</u>		
Rural	3,445	\$ 344,500.0
Very Low	514	163,452.0
Low	879	340,173.0
Single	688	522,880.0
Medium	146	191,552.0
High	0	0.0
Cluster	<u>31</u>	<u>33,480.0</u>
Subtotal	5,703	\$1,596,037.0
<u>Non-Residential</u>		
Shopping Center	0	0.0
Retail/Service	77	\$ 76,076.0
Hotel/Motel	0	0.0
Business Park	102	81,396.0
Business Park/Office	0	0.0
Mixed Commercial/Residential	<u>0</u>	<u>0.0</u>
Subtotal	179	\$ 157,472.0
TOTAL	5,882	\$1,753,509.0

<sup>1/</sup> Based on Agoura Hills General Plan land use designations.

Source: Table 25; Williams-Kuebelbeck & Associates, Inc.





Table 28

MARKET VALUE PROJECTIONS  
 AGOURA HILLS CITY AND STUDY AREA TOTAL  
 (in Thousands of Constant 1984 Dollars)

<u>Land Use</u>	<u>Acres</u>	<u>Total Market Area</u>
<u>Residential</u>		
Rural	3,636	\$ 363,600.0
Very Low	801	254,718.0
Low	1,053	407,511.0
Single	1,936	1,471,360.0
Medium	258	338,496.0
High	15	33,750.0
Cluster	<u>67</u>	<u>72,360.0</u>
Subtotal	7,766	\$2,941,795.0
<u>Non-Residential</u>		
Shopping Center	24	\$ 25,536.0
Retail/Service	270	266,760.0
Hotel/Motel	15	27,000.0
Business Park	205	163,590.0
Business Park/Office	135	286,875.0
Mixed Commercial/Residential	<u>82</u>	<u>62,894.0</u>
Subtotal	731	\$ 832,655.0
TOTAL	8,497	\$3,774,450.0

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Source: Tables 26 and 27; Williams-Kuebelbeck & Associates, Inc.



Table 29

AVERAGE REVENUE MULTIPLIERS  
 AGOURA HILLS GENERAL FUND  
 (In Constant 1984 Dollars)

Revenue Source	Per Unit Average Revenue Multiplier	
	Per Capita <sup>2/</sup>	Per Non-Residential <sup>3/</sup> Acre
<u>Taxes</u>		
Franchise Tax	\$10.0	-
Business Tax	-	\$480.0
<u>Licenses and Permits</u>		
Bicycle Licenses	.05	-
Building Permits	7.7	75.0
<u>Charges for Current Service</u>		
Planning and Zoning	3.6	35.0
Plan Check Engineer	2.1	20.0
<u>Fines, Forfeits and Penalties</u>		
Interest Income	7.2	70.0
Rents	.9	9.0
<u>Intergovernmental</u>		
Motor Vehicle in Lieu	20.0	
Cigarette Tax	3.0	
Grants	1.0	
<u>Interfund Operating Transfers</u>		
Revenue Sharing	4.8	
Gas Tax Fund	12.8	
County Aid to Cities	1.3	
Traffic Safety Fund (vehicle code fines)	3.6	
Parks Funds	.2	

Note: These revenue multipliers have been developed based upon: discussions with officials at various City and County agencies; and analysis of the 1983/84 Agoura Hills City Budget and city budgets from selected comparable cities.

- 1/ Units or areas from which revenues are generated. All unit projections are based on the 1984 Agoura Hills General Plan.
- 2/ An average cost multiplier based on population, rather than on residential acreage, was considered more appropriate for estimating costs attributed to residential land use in Agoura Hills, due to the low density of residential use, particularly in the Study Area, projected by the Agoura Hills General Plan. Projected populations for the City and Study Area of Agoura Hills are 20,000 and 19,000 persons, respectively.
- 3/ Includes commercial, industrial and institutional land uses; projected at 612 acres for the City and 207 acres for the Study Area.
- 4/ Projected commercial and industrial acres total 552 for the City and 179 for the Study Area.

Source: Table A-3; Williams-Kuebelbeck & Associates, Inc.



Table 30

AVERAGE COST MULTIPLIERS  
CITY OF AGOURA HILLS GENERAL FUND  
(in Constant 1984 Dollars)

<u>Department</u>	<u>Per Unit Average Cost Multiplier</u>	
	<u>Per Capita<sup>2/</sup></u>	<u>Non-Residential<sup>3/</sup> Per Acre</u>
<u>General Government</u>		
City Council	\$ 1.10	\$ 11.00
City Manager	7.20	70.00
City Clerk	1.70	16.50
City Treasurer	0.40	3.50
Finance Department	10.30	100.00
City Attorney	17.00	165.00
City Prosecutor	2.60	25.00
Non-Departmental	.80	7.50
<u>Public Safety</u>		
Police	\$ 56.70	\$550.00
Wildlands Fire	5.20	50.00
Animal Control	.40	4.00
<u>Community Development</u>		
Current Planning	\$ 9.30	\$ 90.00
Advanced Planning	2.70	22.00
Community Services	3.70	-
<u>Public Works</u>		
Administration	\$ 2.60	\$ 25.00
City Engineering	16.00	155.00
Street Maintenance	8.30	80.00
Parkway and Tree Maintenance	7.70	75.00
Public Facilities Maintenance	4.10	40.00
Traffic Safety	3.30	32.00
Flood Control	2.10	20.00
Parks Maintenance	2.50	-
Equipment Maintenance	4.10	40.00

Note: These cost multipliers have been based upon: discussions with officials at various City and County agencies; and analysis of the 1983/84 Agoura Hills City Budget and city budgets from selected comparable cities.

- <sup>1/</sup> Units or areas from which costs are generated. All unit projections are based on the 1984 Agoura Hills General Plan.
- <sup>2/</sup> An average cost multiplier based on population, rather than on residential acreage, was considered more appropriate for estimating costs attributed to residential land use in Agoura Hills, due to the low density of residential use, particularly in the Study Area, as projected in the Agoura Hills General Plan. The projected populations of the City and the Study Area are 20,000 and 19,000 persons, respectively.
- <sup>3/</sup> Includes commercial, industrial and institutional land uses; projected at 612 acres for the City and 207 acres for the Study Area.

Source: Table A-4; Williams-Kuebelbeck & Associates, Inc.





Table 31

AGOURA HILLS GENERAL FUND  
REVENUE PROJECTIONS  
BY REVENUE SOURCE

<u>Revenue Source</u>	<u>City</u>	<u>Study Area</u>	<u>Total</u>
<u>Taxes</u>			
Property Taxes <sup>1/</sup>	\$1,818,800	\$1,578,200	\$ 3,397,000
Sales Tax <sup>2/</sup>	1,739,400	600,600	2,340,000
Transient Occupancy Tax <sup>3/</sup>	722,700	0	722,700
Franchise Tax	200,000	190,000	390,000
Business Tax	265,000	85,900	350,900
Subtotal	\$4,745,900	\$2,454,700	\$ 7,200,600
<u>Licenses and Permits</u>			
Bicycle License	\$ 1,000	\$ 1,000	\$ 2,000
Building Permits	200,000	161,900	361,900
Subtotal	\$ 201,000	\$ 162,900	\$ 363,900
<u>Charges for Current Service</u>			
Planning and Zoning	\$ 93,500	\$ 75,600	\$ 169,100
Plan Check Engineer	54,200	44,000	98,200
Subtotal	\$ 147,700	\$ 119,600	\$ 267,300
<u>Fines, Forfeits and Penalties</u>			
City Code Fine	\$ 20,000	\$ 19,000	\$ 39,000
<u>Use of Money and Property</u>			
Interest Income	\$ 186,800	\$ 151,300	\$ 338,100
Rents	23,400	19,000	42,400
Subtotal	\$ 210,200	\$ 170,300	\$ 380,500
<u>Intergovernmental</u>			
Motor Vehicle in Lieu	\$ 400,000	\$ 380,000	\$ 780,000
Cigarette Tax	60,000	57,000	117,000
Grants	20,000	19,000	39,000
Subtotal	\$ 480,000	\$ 456,000	\$ 936,000
<u>Interfund Operating Transfers</u>			
Revenue Sharing	\$ 96,000	\$ 91,200	\$ 187,200
Gas Tax Fund	256,000	243,200	499,200
County Aid to Cities	26,000	24,700	50,700
Traffic Safety Fund (vehicle code fines)	72,000	68,400	140,400
Parks Fund	4,000	3,800	7,800
Subtotal	\$ 454,000	\$ 431,300	\$ 885,300
TOTAL	\$6,258,800	\$3,813,800	\$10,072,600

<sup>1/</sup> See Table A-5 for property tax projections.

<sup>2/</sup> See Table A-6 for sales tax projections.

<sup>3/</sup> Calculated at 8 percent of annual gross receipts and based upon 600 rooms for the City and zero rooms for the Study Area. Assumes annual average occupancy at 75.0 percent and average double occupancy room rates totalling \$55.00 per occupied room night.

Source: Table 29; Williams-Kuebelbeck & Associates, Inc.



Table 32  
AGOURA HILLS GENERAL FUND  
EXPENDITURE PROJECTIONS  
BY DEPARTMENT

<u>Department</u>	<u>City</u>	<u>Study Area</u>	<u>Total</u>
<u>General Government</u>			
City Council	\$ 27,400	\$ 23,100	\$ 50,500
City Manager	186,800	151,300	338,100
City Clerk	44,100	35,800	79,900
City Treasurer	10,100	8,400	18,500
Finance Department	267,200	216,400	483,600
City Attorney	67,400	54,600	122,000
City Prosecutor	20,700	16,800	37,500
Non-Departmental	<u>441,000</u>	<u>357,100</u>	<u>798,100</u>
Subtotal	\$1,064,700	\$ 863,500	\$1,928,200
<u>Public Safety</u>			
Police	\$1,470,600	\$1,191,200	\$2,661,800
Wildlands Fire Protection	132,600	107,300	239,900
Animal Control	<u>10,400</u>	<u>8,400</u>	<u>18,800</u>
Subtotal	\$1,613,600	\$1,306,900	\$2,920,500
<u>Community Development</u>			
Current Planning	\$ 241,100	\$ 195,300	\$ 436,400
Advanced Planning	67,400	55,800	123,200
Community Services	<u>74,000</u>	<u>70,300</u>	<u>144,300</u>
Subtotal	\$ 382,500	\$ 321,400	\$ 703,900
<u>Public Works</u>			
Administration	\$ 67,400	\$ 54,600	\$ 122,000
City Engineering	414,900	336,000	750,900
Street Maintenance	215,000	174,300	389,300
Parkway and Street Maintenance	200,000	161,900	361,900
Public Facilities Maintenance	106,500	86,200	192,700
Traffic Safety	85,500	69,400	154,900
Flood Control	54,200	44,000	98,200
Parks Maintenance	50,000	47,500	97,500
Equipment Maintenance	<u>106,500</u>	<u>86,200</u>	<u>192,700</u>
Subtotal	\$1,300,000	\$1,060,100	\$2,360,100
TOTAL	<u>\$4,360,800</u>	<u>\$3,551,900</u>	<u>\$7,912,700</u>

Source: Table 30; Williams-Kuebelbeck & Associates, Inc.



Table 33

COMPARISON OF REVENUES AND EXPENDITURES  
BY LAND USE

<u>Land Use</u>	<u>Revenues</u>	<u>Expenditures</u>	<u>Net Revenues (Costs)</u>
<u>CITY</u>			
Residential	\$ 2,803,600	\$ 3,394,000	\$ (590,400)
Commercial	3,180,000	604,200	2,575,800
Industrial	262,700	267,700	(5,000)
Institutional	<u>12,500</u>	<u>94,900</u>	<u>(82,400)</u>
Total	\$ 6,258,800	\$ 4,360,800	\$1,898,000
<u>STUDY AREA</u>			
Residential	\$ 2,942,000	\$ 3,224,300	\$ (282,300)
Commercial	716,800	121,900	594,900
Industrial	149,100	161,500	(12,400)
Institutional	<u>5,900</u>	<u>44,200</u>	<u>(38,300)</u>
Total	\$ 3,813,800	\$ 3,551,900	\$ 161,900
<u>TOTAL</u>			
Residential	\$ 5,745,600	\$ 6,618,300	\$ (872,700)
Commercial	3,896,800	726,100	3,170,700
Industrial	411,800	429,200	(17,400)
Institutional	<u>18,400</u>	<u>139,100</u>	<u>(120,700)</u>
Total	\$10,072,600	\$ 7,912,700	\$2,159,900

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Source: Tables A-7 and A-8; Williams-Kuebelbeck & Associates, Inc.





### 3.15 Energy

#### Environmental Setting

The importance of energy conservation has been made clear to the public in recent years as a result of increases in the price of energy, recognition of the national interest in reducing dependence on foreign energy sources, and increasing concern with the environmental impact of coal and nuclear energy sources on which the U.S. will depend for expansion of generating capacity.

Total use of energy by sector in the U.S. as predicted for 1985 is summarized in the table below:

TABLE 34  
UNITED STATES ENERGY USE BY SECTOR

Economic Sector	1985 Energy Use	
	Quadrillion Btu	Percent
Residential	8.7	8.1
Commercial	5.7	5.3
Industrial	24.0	22.3
Transportation	22.6	21.1
Exports	1.5	1.4
Conversion, Distrib Losses	44.8	41.8
TOTAL	107.3	100.0

Source: U.S. Energy Research and Development Administration, "A National Plan for Energy Research, Development and Demonstration", 1975.

#### Environmental Impact

Energy use for the proposed General Plan is shown in Tables 18 and 20 of Section 3.13.

Because the growth anticipated in Agoura Hills is a small proportion of regional growth, and does not represent a significantly different energy use compared to growth in other locations in the region, the impact of this growth increment on regional energy resources is not expected to be significant. However, all unnecessary energy use is of concern, and mitigation measures are included in the General Plan to reduce energy consumption.

#### Mitigation Measures

The following mitigation measures are included in the proposed plan to reduce energy consumption:

1. Providing substantial employment near residential areas to reduce vehicle miles traveled.
2. Requiring specific plans to provide for high-occupancy vehicles and public transportation through provision of park-and-ride lots.



3. Emphasizing bicycle and pedestrian circulation systems.
4. Maintaining a system of traffic signals and controls to minimize waiting time and speed changes on through routes.
5. Providing incentives for private sector provision of alternative transportation modes.
6. Requiring energy review of subdivision and site planning.
7. Requiring solar access analysis and design in all large projects.
8. Providing an energy conservation public information program.
9. Emphasizing energy conservation in municipal projects.



3.16 Human Health

Environmental  
Setting

Potential human health impacts of a project include the creation of any health hazard, and the exposure of people to potential health hazards. No significant health hazards are known to exist in the project area.

Environmental  
Impact

The project is not expected to result in the exposure of people to health hazards. The exposure of people to environmental noise is discussed in Section 3.5.

Mitigation  
Measures

None.



### 3.17 Aesthetics

#### Environmental Setting

Over half of Agoura Hills and the majority of the study area is currently undeveloped land. Vegetation consists primarily of coastal sage scrub and chaparral communities with some oak woodlands, grasslands and riparian communities. Major physiographic features include several prominent ridgelines, the most notable being the 2,036 foot Ladyface Mountain, rolling hills and valley oak savannah areas, and several major canyons. Agoura Hills, especially the Old Agoura area, has a rural flavor.

#### Environmental Impact

The project will have a significant visual and aesthetic effect on the Agoura Hills area. Additionally, development in the Oak Park community, north of Agoura Hills, will impact the visual and aesthetic environment of Agoura Hills. The Santa Monica Mountains National Recreation Area to the east and south of the City will attract many visitors. The overall aesthetic effect of the Recreation Area on Agoura Hills, however, should be positive since development in most of these parklands will be prohibited.

Most of the development areas were chosen to minimally disrupt the environment. Conservation Element strategies for open space preservation and local ordinances controlling hillside development and signage, especially along the Ventura Freeway corridor, will minimize many of the potential adverse impacts associated with views.

#### Mitigation Measures

The mitigation measures presented below are assumed to reduce adverse visual and aesthetic impacts to an acceptable, but not insignificant, level. A level of impact acceptable to the public is considered to be achieved by compliance with the City Hillside Development Ordinance, which embodies public policy regarding acceptable hillside development impacts. Because the visual characteristics of the project area will be substantially modified by development, this impact cannot be considered insignificant. Because of the substantial differences of opinion about visual and aesthetic quality, the project is likely to be considered to have unacceptable adverse aesthetic impacts by many people.

A number of mitigation measures are incorporated in the Hillside Development Ordinance with which the General Plan must comply. These measures include the following:





1. Tentative subdivision maps filed as a result of the specific plan must provide for documentation including photographs, sketches and renderings relating to ridgeline preservation and recountering through visual analysis as deemed necessary by the City.
2. Tentative subdivision maps shall not be approved without appropriate covenants, conditions and restrictions providing for the development and maintenance of slopes.
3. Rounding of slope tops and bottoms or softening of abrupt changes in gradient are required.
4. Architectural elements, colors and materials shall be selected to blend in to the natural environment.
5. All cut and fill slopes are to be landscaped in accordance with detailed conditions of the Hillside Development Ordinance.

In addition to mitigation measures of the Hillside Development Ordinance, the following mitigation measures are included in the proposed project:

6. Primary ridgelines and the prominent knoll feature in the project site will remain undeveloped in accordance with the City General Plan.
7. Prior to approval of plans for development of the major developments, design plans and design guidelines will be prepared for review and approval by the City.
8. Flood control plans submitted by the developer shall include as an alternative, a natural or semi-natural channel in the "gateway" area for City review of technical and economic feasibility. A natural or semi-natural channel is a channel that provides for adequate storm flows but is constructed to provide the appearance of a natural stream channel through appropriate engineering design.



### 3.18 Parks and Recreation

#### Environmental Setting

The Santa Monica Mountains National Recreation Area (SMMNRA) was established by Congress in 1978. The Recreation Area encompasses approximately 150,000 acres and stretches for 47 miles from Griffith Park to Point Mugu State Park, bounding the Agoura Hills area on the south, east and part of the northern city limits. Its boundaries are the Pacific Ocean to the south, the San Fernando Valley and Thousand Oaks to the north, the Ventura/Oxnard area to the west and the Los Angeles area to the east. About 37 million people visit the public lands each year. Most of them visit the beaches, but up to 2 million people a year also visit the mountainous interior (Draft Land Protection Plan, p. 6).

In establishing the Recreation Area, Congress found that "there are significant scenic, recreational, educational, scientific, natural, archaeological, and public health benefits provided by the Santa Monica Mountains and adjacent coastline area" (Sec. 507(a), P.L. 95-625). The National Park Service will preserve and manage these resources and enhance educational and recreational opportunities. In response to this legislative mandate, a General Management Plan has been prepared for the Recreation Area which identifies objectives in managing the SMMNRA. The General Management Plan addresses special management considerations due to the mixture of public and private lands that comprise the recreation area. Nearly 68,000 acres, or a little less than half, of the recreation area will remain in private ownership (Draft Land Protection Plan, p 6).

A recent Draft Land Protection Plan (Oct. 1983) identifies the specific areas within the Recreation Area that are targeted for purchase by the National Park Service. \$155,000,000 has been authorized for acquisition; as of September 30, 1983, \$41,135,200 had been spent. In the Agoura Hills study area, land areas planned for purchase include a portion of the Palo Comado Canyon and Paramount Ranch. The Palo Comado Canyon and its surrounding area has been designated as a significant ecological area by the Los Angeles County Board of Supervisors mostly because of its high concentration of birds of prey and valley oak stands (for a further discussion of significant ecological areas in the study area, see p. 55-58). Paramount Ranch is the current site of the Renaissance Pleasure Faire. Over a month and one-half period each spring, the Faire is attended by over 300,000 people (Draft Natural Resource Management Plan, Environmental Assessment, p. 158). The Ranch was used a great deal by the movie industry during the last 50 years and movies are still filmed at the site today.



In addition to the Santa Monica Mountains National Recreation Area, there are several other parks and recreation areas that serve the Agoura Hills Study Area. A map identifying these areas and a table describing these areas, which includes specific parks within the National Recreation Area, are provided on pages 129 and 131.

One component of parks and recreation for Agoura Hills is a trails system. The Santa Monica Mountains Conservancy is implementing a trails system for the Recreation Area and the Agoura Hills area. The Public Resources Code (Section 33204[c]) states: "The Conservancy may . . . award grants to state agencies, cities, counties, resource conservation districts and recreation and park districts for the purpose of acquiring sites identified as necessary for park, recreation or conservation purposes and for development of essential related public facilities." The Conservancy recently awarded a grant to the City of Agoura Hills to acquire those portions of the Zuma Ridge Trail that are within the City limits. Completion of this trail heads the list of priorities for the City's trails program. The Ladyface trails system is Agoura Hills' second priority. Several additional trails have been proposed for the City of Agoura Hills.

A system of bikeways is also proposed for the Agoura Hills area. The Parks and Recreation Committee of the City of Agoura Hills has proposed a system of bikeways including 3 traverse routes, direct access to seven parks, four schools, major retail areas, City Hall and various residential segments of the City. (These bikeways are shown in the General Plan.)

Environmental  
Impact

Recreational use of the study area has several possible impacts on the environment. These impacts include increased fire potential and wildlife habitat alteration, especially through trail construction into remote portions of the study area.

Recreational use of areas outside of the study area, especially the Santa Monica Mountains National Recreation Area, also impact the study area. Increased regional air pollution as a result of recreation area users trips to, through and from the area and its associated energy consumption are included as well as littering.





**TABLE 35  
RECREATIONAL FACILITIES**

NAME	LOCATION	TYPE	SIZE (acres)	FACILITIES
Agoura Park	5217 Cheseboro Road	Local	3	Community events, bldg., children's play area, picnic areas, basketball courts, 2 horseshoe pits, baseball diamonds
Chumash Park	5550 Medea Valley Dr.	Local	12	Baseball diamond, soccer field, picnic areas
Grape Arbor	5100 Parkville Rd., Agoura	Local	5	Picnic area
Medea Creek Park	Creek Drive between Laurel Drive and Imbler Court	Local	3.69	Undeveloped
Morrison Ranch (unnamed) - goes by name of T.O. Park	Forest Cove Lane and Thousand Oaks Boulevard	Local	4	Undeveloped
Rainbow Crest	Trail Creek Drive and Forest Cove Lane	Local	10	Undeveloped
Reyes Adobe	Goodspring and Fairgrange Drive	Local	4	Historical adobe
Sumac	Hollow Brook Avenue and Calmfield	Local	4	Children's play area, pathway through park
Oakbrook Park	Erbes and Pederson Rds., Thousand Oaks	Regional	482	Undeveloped
Wildwood Park	Terminus of Avenida de los Arboles, Thousand Oaks	Regional	12,500	Day camp, campground, picnic area, 32 miles of trails, nature center
Zuma Beach	12 miles north of Malibu off the Pacific Coast Highway	Regional	105	Volleyball, swing sets
Charmlee County Park	Encinal Canyon Road and Pacific Coast Highway, Malibu	County	460	Picnic area
Tapia Park	884 N. Las Virgenes Rd. Calabasas	County	110	Picnic area
Leo Carillo Park	28 miles west of Santa Monica off the Pacific Coast Highway	State	1,578	Camping, supplies, trailer sanitation station



TABLE 35  
RECREATIONAL FACILITIES (continued)

NAME	LOCATION	TYPE	SIZE (acres)	FACILITIES
Corral Beach	4 miles west of Santa Monica Civic Center on the Pacific Coast Highway	State	4	Volleyball
Las Tunas Beach	6 miles west of Santa Monica along the Pacific Coast Highway	State	2	Volleyball, picnic areas
Malibu Creek State Park	4 miles south of U.S. 101 at Las Virgenes and Malibu Canyon Roads	State	4,071	Picnic areas, hiking, equestrian trails
Malibu Lagoon Beach	Up the coast from Malibu Pier where Malibu Creek and the Pacific Coast Highway cross	State	50	Nature trails, exhibits
Point Dume Beach	Northernmost extremity of the Santa Monica Bay, 18 miles north of Santa Monica on the Pacific Coast Highway	State	34	Concessions, showers, volleyball
Point Mugu	12 miles south of Oxnard off the Pacific Coast Highway	State	13,000	Picnic areas, hiking, campgrounds
Topanga Canyon Beach	Mouth of Topanga Creek near the Pacific Coast Highway	State	32	Volleyball

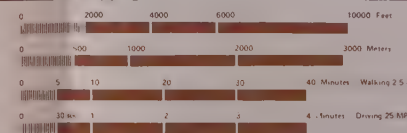




- National Rec Area Policy**
- National Recreation Area
  - National Park Service Land
  - Priority Fee Acquisitions
  - In acquisition process
  - Proposed Fee Acquisitions
  - Proposed Easement Acquis
  - Other Parks/Public Lands
  - Proposed State Acquisitions

FIGURE 12.  
RECREATION AREAS

# **AGOURA HILLS GENERAL PLAN EIR**



**The Planning Group**  
Barton Aschman Associates  
Williams Kuebelbeck Associates  
Leighton & Associates



### 3.19 Archaeological/Historic

#### Environmental Setting

Big Game Hunters who arrived at least 12,000 years ago were the first inhabitants of the Agoura area. Climate changes led to a shift in hunting practices to hunting smaller animals and gathering plants. Seed gatherers who used various plant processing implements to exploit a wide range of vegetable resources exemplified the "Millingstone" Period. Relatively sedentary groups of Indians had moved into the Northern Santa Monica Mountains and the adjoining canyons and inland valleys by 8,000 B.C. After 500 A.D., which is known as the "Late Prehistoric Phase," the Chumash Indians of the Agoura had evolved into a sophisticated hunting and gathering society. The focus of this society was the village which functioned as a satellite arrangement of specialized activity sites, providing support to the major village locations.

The State Archaeological, Historic and Paleontological Task Force recently found that the State of California annually loses about 1400 archaeological sites, 200 historic places and an undetermined amount of Indian cemeteries and paleontological sites to development. UCLA's Institute of Archaeology provides an archaeological records search which identifies sites containing artifacts. In the study area, there have been 59 archaeological sites located to date, several of which have been badly disturbed or destroyed. There are most likely many additional sites which have not been mapped. For most of Agoura Hills, less than 50 percent of the area has been mapped. All but one of the sites located are aboriginal and from all time periods, Millingstone to Late Prehistoric. There are a variety of site types such as villages, cemeteries and occupation areas. Artifacts found at these sites include stone tools, stone bowls, bones, shells, beads and burials.

Perhaps one of the most important sites to have been discovered in the Agoura Valley is an Indian cemetery on Medea Creek. An archaeological team at UCLA has described this cemetery as the "largest, unvandalized Indian cemetery in America." To date, 418 Chumash Indian skeletons have been uncovered, some of which date as far back as 800 years.

Atop Mount Strella near the crossroads of Agoura Road and Lewis Road is a fourteen foot Indian statue built by Jean de Strelecki, a Polish count and artist. De Strelecki was impressed with the few remaining Indians in the Agoura area and the statue was built to honor them. Unveiled on May 5, 1940, the statue was given the name "Chief White Eagle." Occasional "painting parties" are held to keep the statue bright and colorful.





Also located near Agoura Road and Lewis Road is a school house which was built in the 1930's. Currently, the building houses a barber shop. The Las Virgenes Historical Society considers this a potential historic site suitable for some form of preservation.

The major historic site in the City of Agoura Hills is the Reyes Adobe, located on a knoll several hundred feet north of the Ventura Freeway on Reyes Adobe Boulevard and surrounded by new subdivisions. The site of the adobe was originally part of a 17,760 acre land grant that extended from Liberty Canyon on the east to the edge of Westlake Village on the west. It was originally given to Miguel Ortega under the direction of King Philip of Spain and was called El Rancho de Nuestra Senora Reina de Las Virgenes. Later, under the U.S. flag, ownership of the land grant was filed by Dona Maria Antonia Machado del Reyes. Her heirs, Jose Reyes and Maria Altgracia Reyes de Vejar built the adobe in 1820. It is one of the oldest buildings in California.

The bandit Joaquin Murietta often hid at the adobe in the mid-1800's, and priests stopped at the adobe as they wandered from mission to mission along the California coast. The adobe was passed on to the family of Don Jose Reyes through the 19th Century. In 1945, a private individual purchased the adobe. Community efforts in 1978 saved the adobe from becoming part of a proposed housing subdivision project.

The Las Virgenes Historic Society has held several annual restoration fund-raising activities. An architect's report was completed in December 1983 detailing the problems with the structure as a first step in restoration efforts. The Society is currently in the process of getting the Reyes Adobe on the National Register. Ultimately, the Society wants to make the adobe a museum.

The Paramount Ranch is also located in the study area. The Ranch originally covered 4,000 acres but today covers only 336 acres. In the early 1900's, the area was a cattle ranch. After the 1920's, it was used as a working ranch and the operations area for Paramount Studios. Films such as "Gun Fight at the O.K. Corral," "Adventures of Marco Polo" and the "Adventures of Tom Sawyer" were filmed at the Ranch. In 1952 the Paramount Ranch was sold to the Hertz family for recreation and leisure purposes. Films made at the site during this period included "Rin Tin Tin", "Have Gun Will Travel" and "Cisco Kid." Today commercials and spot shooting continue at the Paramount Ranch.



In 1980 there were plans to develop 159 homes on the Ranch, but the National Park Service purchased the Ranch in 1980 and it is now a cornerstone of the Santa Monica Mountains National Recreation Area.

Environmental  
Impacts

Development in Agoura Hills will involve grading that could result in the destruction of archaeological sites. A major threat to archaeological artifacts is the lack of information about their location. Sites are often unknowingly destroyed during development. Another possible impact on these resources is loss from collectors and vandals as a result of increasing access to remote areas.

Sites that have already been identified are also destroyed during development. The sites have value principally when they can be excavated and documented by qualified archaeologists or paleontologists, and do not represent a resource that should necessarily remain intact in place. Because of the lack of information available about archaeological resources in Agoura Hills, proper excavation and documentation of archaeological sites should be attempted, and their loss without such excavation and documentation should be considered a potential significant adverse impact of the development.

Mitigation  
Measures

A number of mitigation measures are proposed to mitigate the potentially significant impact of loss of historic, archaeological and paleontological sites:

1. A Cultural resources survey should be conducted in each area for which grading or other development is proposed. This cultural resources survey should include a survey of local documented archaeological and historic sites and a field survey to determine the current quality of the sites, confirm documented sites and identify new sites. The survey should indicate the value of the sites and recommend a method of mitigating potential development impacts.

2. The results of the cultural resources survey should be transmitted to local universities, museums and government agencies directly concerned with archaeology of the region. These agencies should be informed of the potential for development of the identified sites and the intended phasing of development, and invited to document the site.

3. Agencies expressing interest in the sites should be permitted access to the property for conducting legitimate archaeological research in accordance with recommendations of the cultural resources survey.



4. Identified archaeological sites of significant value which cannot be excavated prior to development should be protected in the specific plan through one of the following techniques:

Preservation of the area in open space use without disruption of the site, and with some means of protection from intrusion.

Burying of the site in a manner that preserves the site and maintains its accessibility for possible future excavation.

Phasing of development to avoid disruption of the site until excavation can take place.

5. Specific plans will provide for excavation and documentation of archaeological and paleontological sites of significant value.





#### 4. UNAVOIDABLE ADVERSE EFFECTS

The following is a summary of significant environmental effects identified in the main text of the EIR which cannot be avoided if the General Plan is adopted as proposed. Some of these impacts can be mitigated through measures included in the Plan or outlined in the EIR but not reduced to a level of insignificance.

1. Modification of the Physical Appearance of Undeveloped Areas. Development cannot take place without significant modification of the appearance of undeveloped back country areas. This modification will include grading to provide suitable building sites, roadways, and stabilize unstable slopes and landslide areas. Although key features have been identified for retention, the back country will not look like grazing land as it does today.

Urban landscaping will be added and structures will be prominent visually in the back country. Open space will remain in key open space corridors intended to provide a strong sense of open space.

This impact cannot be eliminated without prohibiting development. Prohibiting development is not considered justified because of the strong economic demand for development of the planning area, regional need for additional housing, and legal obligations of the City.

2. Loss of Existing Natural Habitat. Some of the habitat areas in the planning area are of high quality. Riparian woodland areas support a broad range of mammals, birds, and insects. Some of the other habitats provide range for large mammals and birds of prey. Physical loss of a portion of this habitat, combined with habitat modification as a result of urban runoff, fire control measures, and intrusion by humans and domestic animals will significantly modify this habitat.

Highest quality habitat areas have, in general, been provided as long-term open space areas in the General Plan. The loss of lower-quality areas is considered justified to provide needed flexibility in providing a high-quality residential environment in new development. Maintenance of open space corridors will insure that habitat areas are connected into as large a contiguous habitat area as possible.

3. Modification to Land Use. The Plan proposes the direct modification of land use in currently undeveloped areas of the City. This is a direct objective of the Plan and cannot be achieved without this environmental impact.



4. Additional Traffic on the Regional Circulation System. The project will add traffic to the regional circulation system, increasing levels of congestion if measures are not taken at the regional level to provide additional capacity and improve service.

5. Requirement for Additional Public Facilities. The project will require construction of a complete urban infrastructure serving portions of the project area. This infrastructure is included in the General Plan, and Plan policies and implementing ordinances are intended to assure that infrastructure is available at the time development is ready for occupancy.

6. Loss of Archaeological and Paleontological Sites. Development involves the potential loss of archaeological and paleontological sites. Mitigation measures include informing applicable agencies of the existence and nature of the sites, providing an opportunity for documentation and requiring specific plans to include documentation of significant sites. However, it is unlikely that all sites in the area will be properly documented prior to development.

7. Reduced Air Quality. The proposed development will result in reduction in regional and local air quality compared to the case in which no development were to occur. Air quality effects are expected to be similar to the region to those from similar development in any other location. The project is consistent with population projections in the regional Air Quality Management Plan.

8. Increases in Noise Levels. By adding traffic to existing streets and the freeway, noise levels will be increased along these circulation corridors. New developments will be required to provide adequate sound insulation or barriers to prevent future noise problems.

9. Increase in Regional Energy Consumption. The project will result in increased energy consumption in the region relative to that that would take place if no development were to occur. This additional energy consumption is similar to that that would be expected if this development were to take place at any location within the region.

10. Increases in Fires. The Agoura Hills area is very susceptible to fires, especially during the hot, dry summers. Increased development in the area will lead to increases in actual and potential fires, and the loss of life and property that accompanies a fire. Development controls, provided for in the General Plan, including density restrictions and open space provisions, will help to minimize the outbreak and effects of fire in the study area.



## 5. CUMULATIVE IMPACTS

Cumulative Impacts include effects of related projects producing impacts related to those of the proposed project, and impacts of different types which are individually limited but cumulatively considerable.

Cumulative effects are discussed throughout the EIR where they are considered potentially significant. Related projects or anticipated developments for which cumulative effects are considered in the EIR include the following:

1. Recreational Use of the Santa Monica Mountains National Recreation Area. The beaches in the Santa Monica Mountains National Recreation Area attract 30 million people annually. The mountain areas attract from 800,000 to 2,000,000 people annually (General Management Plan, Santa Monica Mountains National Recreation Area, p. 15). The recreation area is opening areas of the Santa Monica Mountains to greater public use. In early 1981, several areas were opened, including Paramount Ranch, which is in the study area.

Additionally, part of the effort of the National Park Service is a cooperative program with other agencies to create a comprehensive trails system, linking areas of the National Recreation Area as well as connecting with trails outside the recreation area boundaries. The Zuma Ridge Trail, portions of which run through Agoura Hills, has already been started.

This increased identity with and accessibility to the National Recreation Area will bring additional users into and through Agoura Hills, impacting the circulation system as well as the economy of the area, especially during the summer months.

2. North Ranch Development. This development in Westlake Village is adjacent to Oak Park. This residential development consists primarily of single family units, although there are some condominiums. 1000 units have been built at North Ranch; up to 4500 more will be constructed on the site.

3. Oak Park Development. Oak Park, located at the northern boundary of the City of Agoura Hills and accessed by Kanan Road, is a planned community which currently has 1,213 residential units. Continuing development in Oak Park includes 5,310 additional residential units, a community center, schools and parks. The additional development will result in a population increase of 11,318 persons from 1982 to 1996 (Oak Park Community Plan, p. 4).





4. General growth of population and employment in the region in accordance with regional forecasts.

The above projects are cumulatively consistent with regional plans as identified in the SCAG-82 Growth Forecast Policy published by the Southern California Association of Governments.

Cumulative impacts on the circulation system in the project area are significant. Cumulative impacts were considered in the EIR by using future traffic projections which account for the total traffic generated by these projects. Mitigation Measures are discussed under Section 6 of the EIR and are intended to deal not only with the impact of the proposed project, but with cumulative impacts of all other projects as well.





## 6. MITIGATION MEASURES

The following is a summary of mitigation measures as identified in the main body of the EIR which are proposed to minimize the significant effects of the proposed project.

1. Mitigation of Potential Adverse Aesthetic Effects and Modification of Key Physical Features. The project will result in substantial modification of terrain in currently undeveloped areas. Mitigation measures to reduce the impacts of the modification include:

Identification of key physiographic features for permanent open space use in substantially their current form. These key features include major ridgelines, cliffs in the back country, canyon areas, and prominent knolls. This level of preservation of existing landforms was identified as an appropriate compromise between preservation of existing features in their natural state and providing an opportunity for high quality development.

Adoption of hillside development standards including provisions for minimizing the visual impact of hillside development.

Site plan review at various points in the development process including evaluation of aesthetic criteria and preparation of "before" and "after" grading models of major developments.

2. Mitigation of Potential Adverse Effects on Natural Habitats. Key habitat areas have been identified in the open space element of the General Plan. These areas require preservation or restoration of most habitat areas or provision of compensatory open space. Because of the important habitat in Agoura Hills, a substantial open space resource with large habitat areas will continue.

3. Mitigation of Traffic Impacts. Traffic impacts will be mitigated to the extent possible by measures to reduce tripmaking and provide high performance on through routes. Mitigation measures include:

Development of a "balanced" residential community minimizes the need for trips to employment and reduces trip lengths.



Provision for alternate modes of transportation to the automobile, including requirements to provide appropriate transit facilities in large developments, and provisions for bicycle and pedestrian transportation systems.

Policies to provide for smooth flow of traffic on major arterials to reduce energy consumption and increase capacity and level of service.

4. Mitigation of demands on public facilities. Public facilities needs will be met through a requirement that all necessary public facilities be available or on an approved schedule of availability at the time development is occupied in order to insure that no undue strain on public facilities or services exist.

The potential for facilities and services to result in fiscal imbalance for the City will be mitigated by continuing to adjust fees, other revenues and municipal costs to insure that developments pay their way over their life cycle.

5. Mitigation of Loss of Archaeological and Paleontological Resources. The potential for loss of archaeological and paleontological resources will be mitigated by provision for cultural resource surveys as part of each major development, with opportunities provided for appropriate investigations. If investigation is not possible prior to development, sites are to be buried intact or left in open space if possible to allow for future investigation. In spite of these measures, some potentially informative archaeological or paleontological sites may be lost in the development process. The above measures are considered sufficient to insure that the most valuable sites receive attention.

6. Measures to Minimize Adverse Impacts on Air Quality. Measures to minimize adverse impacts on air quality include all mitigation measures to reduce vehicle miles traveled and measures to save energy in buildings. These measures include:

Provision of a "balanced" community providing employment, housing and commercial uses near each other to reduce trip lengths.

Measures to encourage use of public transportation including providing transit facilities and arrangement of land uses to maximize transit accessibility from high-intensity uses.



Measures to save energy in buildings and public activities.

7. Measures to Reduce Noise Conflicts. Noise conflicts are to be prevented in new development through provision of barriers or sound insulation to provide acceptable interior and exterior noise levels for residential areas. Levels have been selected based on recommendations of the U. S. Environmental Protection Agency and the U. S. Department of Housing and Urban Development and are considered to provide a suitable compromise between protecting people from unnecessary noise and providing for economical development and circulation system design.

8. Measures to Reduce Energy Consumption. A number of measures to reduce energy consumption have been identified in the General Plan. These measures include:

Development of a "balanced" residential community reducing vehicle miles traveled and resulting energy consumption.

Provision for transit in specific plans and public agency plans for circulation.

Requirements for energy-efficient subdivision, site planning and building design.

Requirements for solar access analysis in all large projects.

9. Measures to Reduce Fire. Several measures to decrease both the potential for and the damage caused by fire are identified in the EIR. These include the adoption of a non-combustible roofing ordinance, provision of more than one access point for emergency vehicles and resident evacuation, greenbelt construction, and planting with fire retardant vegetation.





## 7. ALTERNATIVES TO THE PROPOSED ACTION

The following section summarizes alternatives to the proposed action. Four major alternatives were analyzed throughout the EIR.

The Malibu/Santa Monica Mountains Plan as adopted by Los Angeles County was taken as a starting point for development of alternatives. (Alternative 3)

Other alternatives were developed by identifying those areas where the Malibu/Santa Monica Mountains Plan was subject to change. Areas of potential change included:

1. Areas now vacant and not in the development approval process.
2. Areas currently in interim use at low intensity.
3. Areas where physical and environmental characteristics would allow consideration of use alternatives.

The consideration of these potential changes led to the development of Alternatives 4 and 5. When the physical environmental constraints and existing land uses were considered, only a few selected areas emerged as having potential for significant changes from the existing Malibu/Santa Monica Mountains Plan.

Alternatives 3-5 were then evaluated by the Agoura Hills General Plan Advisory Committee and City Council. The following constraints were considered in evaluating alternatives:

1. Slope
2. Physiographic features
3. Vegetation
4. Significant Ecological Areas
5. Flooding
6. Geology
7. Seismicity
8. Existing and proposed parklands
9. Existing land use
10. Circulation patterns
11. Watershed locations
12. Air quality preservation
13. Aesthetic requirements
14. Community character preservation
15. "Quality of life" requirements
16. "Infrastructure" adequacy and cost



When all of the above constraints were considered together, development opportunities in the Agoura Hills study area are severely restricted. Although the alternative generation did yield various land use patterns, most development options have more to do with the intensity of a possible use rather than with the use itself.

This evaluation led to the development of the Proposed Project alternative (alternative 6) which is actually a blend of alternatives 3-5.

Each alternative is briefly described and its environmental impacts summarized below (major alternatives are summarized on Table 26):

Alternative 1: No New Development.

This alternative is considered primarily as a basis for comparison with other alternatives. Under this alternative, existing uses would be maintained throughout the proposed project area, and no new development would be permitted. This alternative should not be considered a realistic alternative for adoption by the City.

Alternative 2: No Project.

This alternative considers projected development in the study area based on current land use regulations and development trends. These regulations are based on the Malibu-Santa Monica Mountains Area Plan. Under this alternative, development would continue in the study area by private property owners, and some improvements would take place as required by the City of these developers. However, significant lack of adequate public facilities and infrastructure would arise in the study area. Development would be expected to proceed in some locations where the characteristics of the physical and biological environment would not be considered.

This alternative includes development of significant employment in the freeway corridor, development of a variety of residential densities and unit types throughout the study area. It permits development at low densities throughout steep slope areas and significant ecological areas.

Alternative 2 includes the extension of Thousand Oaks Boulevard to Las Virgenes Canyon and extension of Driver Avenue. Additional freeway ramp improvements, including at a minimum development of loops on the southwest quadrant (or alternative solutions) at Reyes Adobe Road and Kanan Road will be required to support commercial development.



**TABLE 36**  
**GENERAL PLAN ALTERNATIVES**

	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Employment/Labor force balance.	Approx 1.4:1	Approx 1.6:1	Approx 1:1
Cost/revenue to city	Probably intermediate among alternatives	Probably best, but phasing problem to develop employment.	Probably least beneficial to City in long term.
Circulation efficiency	Excellent access with TO/Driver extension, Ramp construction at Reyes Adobe and Kanan.	Moderate access with Driver extended, but not to Las Virgenes. Freeway ramps at Reyes Adobe and Kanan	Least convenient access
Circulation impacts	Greatest disruption of existing residential	Some disruption of existing commercial for ramps.	Least disruptive, lowest cost. Ramp at Kanan only.
Housing opportunity	Difficult to provide low/moderate income housing.	Least ability to provide low/moderate income housing.	Greatest ability to provide low/moderate income housing.
Natural resource conservation	Habitat areas developed with large lots	Some development of habitat areas.	Habitat areas developed under specific plans with major open space areas.
Landforms (all depend on design guidelines)	Much grading for access and development in slope areas.	Much grading for access and development in slope areas.	Least grading with clustering of development.
Open space	Public open space in state park and NRA	Public open space in state park and NRA	Significant natural open space for habitat preservation and natural features preservation.
Noise	Some residential development in noise areas.	Least residential in noise areas. Most arterial noise	Greatest residential developed in noise areas.
Seismic safety	All significant hazards abated or avoided. Most slope development.	All significant hazards abated or avoided.	All significant hazards abated or avoided. Least slope development.
Scenic highways	Most development in scenic corridors	Most intensive development in 101 corridor	Least development in scenic corridors.



**TABLE 36 cont'd**  
**GENERAL PLAN ALTERNATIVES**

	<u>ALTERNATIVE 2</u>	<u>ALTERNATIVE 3</u>	<u>ALTERNATIVE 4</u>
Hazard abatement	Some development in hazard areas.	Some development in hazard areas.	Least development in hazard areas.
Community design	Dispersed community with much rural residential area.	Intensive developed freeway corridor.	Intensive residential with much open space.
Public facilities	Requires dispersal of facilities and services.	Requires high level of services with moderate dispersal.	Requires high level with least dispersal.





Alternative 3: Emphasis on Employment Development.

This alternative includes development of additional employment areas in Palo Comado Canyon and Las Virgenes Canyon, and development of business park areas in the City of Agoura Hills to higher intensity than anticipated under the Malibu/Santa Monica Mountains Area Plan. Some development of four to six stories in height in the freeway corridor is anticipated, with location to be determined based on views and image opportunities.

This alternative requires development of ramp improvements at Reyes Adobe Road and Kanan Road as in Alternative 2. Thousand Oaks Boulevard is extended behind the high school to link with Driver. Driver is extended to the existing landfill access road.

Alternative 4: Emphasis on Housing Development.

This alternative includes development of additional housing areas in Las Virgenes Canyon and selected high-density cluster sites in the study area. This alternative provides somewhat higher population and somewhat lower employment than the Malibu/Santa Monica Mountains Area Plan. Under this alternative, significant open space is preserved in steep slope areas and significant ecological areas, with residential uses developed in high-density clusters at the fringes of these areas.

Additional freeway capacity is developed at Kanan Road or Reyes Adobe Road to serve commercial development. Thousand Oaks Boulevard is extended behind the High School to meet Driver. Driver is extended to the existing landfill access road.

Alternative 5: Proposed Project.

This alternative is a combination of elements of alternatives 2-4. This Alternative combines the employment/labor force balance of Alternative 4, the circulation efficiency of Alternative 2, environmental resource conservation attributes of Alternative 4 and public facility characteristics of Alternative 4 (see Table 36).

Under this Alternative, 8839 residential dwelling units of various density will be constructed and 7,364,000 square feet of nonresidential development will be constructed, the bulk of which will be for business park office and retail uses. The specific land uses for this Alternative are discussed more fully in Section 3.7, Land Use.



## 8. SHORT-TERM VS. LONG-TERM IMPACTS

This section describes the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.

The development of Agoura Hills will have cumulative impacts on air and water quality, solid waste disposal, major circulation systems and other urban systems along with other development in Los Angeles County. The proposed development is consistent with regional plans for growth in Los Angeles County, and this growth is considered in regional plans for continued development of systems to serve this population.

The development of the City in urban uses in the particular configuration proposed will foreclose use of substantial areas for alternative uses except through very high costs to remove these uses for replacement by new uses. Development will thus narrow the range of future choices for uses of this area.

The project is considered to be justified now rather than reserving options for future alternatives because it is considered unlikely that substantially different alternatives would be selected in the long term, and the market demand for development exists in Agoura Hills now. The project is intended to provide a balanced community with long-term functional and economic viability.

Long delay in permitting development without substantial justification would also subject the City to potential legal challenge from property owners seeking to make best use of their property.



## 9. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

This section discusses significant environmental changes which would be involved in the proposed project should it be implemented. Of particular concern are uses of nonrenewable resources and irretrievable commitments of resources.

Development under the proposed plan will commit an estimated \$1,000,000,000 or more in material and labor resources to the development of new residential and commercial facilities and the public facilities to serve them over the 10 to 20-year development period. These resources will be irretrievably committed to similar uses in the same location for the indefinite future. Substantial quantities of building materials and fuel will be utilized in this construction.

These resources would be consumed to provide for similar development in any location, and no unusual characteristics of Agoura Hills make use in Agoura Hills a less desirable location than others for this development.

Existing habitat areas that are of sufficient quality to support a variety of plants and animals will be lost to development.

These commitments of resources are considered justified now because of the strong market demand that exists for development in Agoura Hills. This market demand results from a combination of the desires of individuals and firms to locate in Agoura Hills because of its accessibility, environmental quality and other factors. Not meeting this demand means in general that demand would be met in a less efficient way at another location. Permitting the market to operate, absent a substantial market inequity or public interest to the contrary, in general implies an efficient allocation of resources.





## 10. GROWTH-INDUCING IMPACTS

This section considers the ways development in accordance with the General Plan could encourage economic or population growth, either directly or indirectly, in the surrounding environment. Considerations include the potential for removing obstacles to nearby growth or that may tax existing community services.

The general plan is specifically intended to provide for the orderly growth of Agoura Hills' undeveloped areas. Mitigation measures are provided in the City's development ordinances to insure that development occurs in the method and at the time that it can be accommodated.

Agoura Hills is a small part of a large urbanized region. At its general plan capacity as proposed, Agoura Hills' population will be less than 1% of the 6-county regional population. Agoura Hills' role in promoting growth of this region is relatively small in a regional context. Agoura Hills' actions will serve to permit development within the City's own boundaries, and will in part help to make the development of adjacent areas more feasible in the future by providing urban services nearby.

Business development proposed in Agoura Hills is to a great extent a response to regional demands for business space. Regional growth may be expected to be marginally greater than if the opportunity to meet this demand were not provided in Agoura Hills.

A total of 23,000 jobs are expected to be provided in Agoura Hills in a variety of job categories. Secondary employment related to these jobs is summarized in Section 3.10, Population.



## 11. PERSONS & ORGANIZATIONS CONSULTED

The following were consulted in preparation of this Environmental Impact Report.

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Sacramento, CA 95811

L. A. County Regional Flood Control District  
P. O. Box 2481  
Terminal Anex  
Los Angeles, CA 90051

Santa Monica Mountains Conservancy  
107 South Broadway, Room 7117  
Los Angeles, CA 90012

Southern California Rapid Transit District  
425 South Main Street  
Los Angeles, CA 90013

Southern California Gas Company  
6263 Topanga Canyon Boulevard  
Woodland Hills, CA 91365-0100

Storer Cable  
30901 Agoura Road  
Westlake Village, CA 91361

County of Los Angeles Sheriff's Dept.  
Malibu Station  
23555 Civic Center Way  
Malibu, CA 90265

Dick Jones  
5900 Gleam Court  
Agoura Hills, CA 91301



National Park Service  
Santa Monica Mountains National Recreation Area  
22900 Ventura Boulevard, Suite 140  
Woodland Hills, CA 91364

County Sanitation Districts of Los Angeles County  
1955 Workman Mill Road  
Whittier, CA 90607

Dave Brown  
5860 Belbert Circle  
Calabasas, CA 91302

Las Virgenes Disposal Company  
P. O. Box 308  
Agoura, CA 91301

Las Virgenes Library  
29130 Roadside Drive  
Agoura, CA 91301

Las Virgenes Historical Society  
P. O. Box 124  
Agoura, CA 91301

Las Virgenes Unified School District  
30961 West Agoura Road  
Westlake Village, CA 91361

Las Virgenes Municipal Water District  
4232 Las Virgenes Road  
Calabasas, CA 91302-1994

County of Los Angeles Fire Dept.  
P. O. Box 3009  
Terminal Annex  
Los Angeles, CA 90051

Santa Monica Mountains Task Force  
Sierra Club  
281 Entrada Road  
Santa Monica, CA 90402

State Clearinghouse  
1400 Tenth Street  
Sacramento, CA 95814

Southern District  
Department of Water Resources  
P. O. Box 6598  
Los Angeles, CA 90055





General Projects Section  
Regional Programs Division  
Air Resources Board  
1102 "Q" Street  
P. O. Box 2815  
Sacramento, CA 95812

County of Los Angeles  
Department of Regional Planning  
320 West Temple Street  
Los Angeles, CA 90012

Charles Cooke  
Box 240  
West Kelly Road  
Newbury Park, CA 91320

Ventura County Planning Department  
800 South Victoria Avenue  
Ventura, CA 93009

City of Thousand Oaks  
401 West Hillcrest Drive  
Thousand Oaks, CA 91360

City of Hidden Hills  
5661 North Las Virgenes Road  
Calabasas, CA 91302

City of Westlake Village  
31844 Village Center Road  
Westlake Village, CA 91361

South Coast Air Quality Management District  
9150 Flair Drive  
El Monte, CA 91731

City of Los Angeles  
City Planning Department, Room 561C  
200 North Spring Street  
Los Angeles, CA 90012

County Animal Control  
29525 Agoura Road  
Agoura Hills, CA 91301

Department of Health Services  
County of Los Angeles  
313 North Figueroa  
Los Angeles, CA 90012

Agoura/Las Virgenes Chamber of Commerce  
29039 Thousand Oaks Boulevard  
Agoura Hills, CA 91301



Agoura Beautiful  
29022 Laro Drive  
Agoura Hills, CA 91301

Topanga/Las Virgenes Resource Conservation District  
P. O. Box 164  
Topanga, CA 90290

Los Angeles County Community Development Commission  
1436 Goodrich Boulevard  
Los Angeles, CA 90022

Agoura Hills Chamber of Commerce  
P. O. Box 279  
Agoura Hills, CA 91301

Las Virgenes Homeowners Federation  
P. O. Box 353  
Agoura Hills, CA 91301

Drexel Tucker  
Randell Condominium Association  
27583 West Randell  
Agoura Hills, CA 91301

Mr. Harris  
Old Agoura Homeowners Association  
28347 Balkins Drive  
Agoura Hills, CA 91301

Annandale Townhomes Association  
26813 Conejoview Drive  
Agoura Hills, CA 91301

Hillrise Open Space Association  
29377 Hillrise Drive  
Agoura Hills, CA 91301

Ron Kapla  
Liberty Canyon Homeowners Association  
4025 Defender Drive  
Agoura Hills, CA 91301

Diane Zimmer, President  
Morrison Ranch Homeowners Association  
6238 Watertree Court  
Agoura Hills, CA 91301

Mariam Landberg, President  
Lake Lindero Community Association  
5867 Caphorn Drive  
Agoura Hills, CA 91301



Fountainwood Homeowners Association  
P. O. Box 338  
Agoura Hills, CA 91301

Chris Calvert  
Indian Hills Homeowners Association  
28332 Laura La Plente  
Agoura Hills, CA 91301

Conejo Board of Realtors  
258 Lombard Street  
Thousand Oaks, CA 91360

Las Virgenes Seniors Association  
c/o Ike Brodofsky  
28905 Oakpath Drive  
Agoura Hills, CA 91301

Postmaster  
Agoura Hills, CA 91301

Environmental Studies Division, Engineering  
California State University, Northridge  
18111 Nordhoff Street  
Northridge, CA 91330

Los Angeles County Engineer  
23533 West Civic Center Way  
Malibu, CA 90265

Local Agency Formation Commission  
Room 383, Hall of Administration  
500 West Temple  
Los Angeles, CA 90012

Road Commissioner  
Los Angeles County Road Department  
1540 Alcazar Street  
Los Angeles, CA 90033

Greg Stepanicich, City Attorney  
Agoura Hills  
333 South Hope Street  
Los Angeles, CA 90071

Los Angeles County Department of Parks and Recreation  
433 South Vermont Avenue  
Los Angeles, CA 90020



#### 14. COMMENTS ON THE DRAFT EIR AND RESPONSES TO THOSE COMMENTS

The following section includes a summary of comments received following circulation of the Draft EIR. Following each comment, the response to that comment is stated. The full text of correspondence received follows the comments and responses.

Comments are listed in chronological order by date of correspondence.

##### 1. South Coast Air Quality Management District, August 24, 1984.

Comment: 1982 Air quality data should be replaced with 1983 data, and emission factors updated with current values provided by the District.

Response: Revised pages incorporating these updates are included in the Final Environmental Impact Report. The changes in background data and emission factors are not major and do not change the basic conclusions of the air quality analysis.

##### 2. Southern California Rapid Transit District, August 28, 1984.

Comment: The District recommends the adoption of transit mitigation measures on page 142 of the EIR.

Response: These measures are included in the proposed project.

Comment: The District recommends that mitigation measure 5, page 93, be changed from "encouragement of" to definite adoption of a park and ride lot to place transit on the same level as roadway improvements.

Response: Although the City encourages development of park-and-ride facilities and will seek their development at the time freeway corridor properties are developed and ramp improvements finalized, the City cannot assure that this mitigation measure will be implemented.

Comment: Additional signing showing detailed schedule and route information would cost about \$330 per stop for the approximately 20 stops in the study area. Bus shelters cost \$7000-8000 each, but are often provided free by private firms in return for advertising rights. Adequate shelters and signing provided through Proposition A funds or development fees is particularly useful in small cities where service is less frequent.

Response: The information provided will assist the City in consideration of use of development fees and Proposition A funds for transit improvements.





3. Clay A. Singer, Archaeologist, September 1, 1984.

Comment: Current plans for management of cultural resources within the City's jurisdiction are inadequate and do not comply with existing laws and public policies.

Response: Mitigation measures for dealing with archeological sites were developed based on current policies outlined in the California Environmental Quality Act and the CEQA Guidelines. Review of the comments of Mr. Singer indicates that it is appropriate to place greater emphasis in the plan and EIR on preservation of sites in place, and to emphasize the mitigation measures requiring investigation of all areas for archaeological potential prior to development, with the objective of insuring that plans provide for preservation of significant sites in place whenever feasible. However, the City does not have the resources to protect sites on private property where protection of such sites would preclude the beneficial private use of the property.

Comment: Little information is provided on the existing sites or their value.

Response: Information was provided as received from the UCLA Archaeological Survey, the regional depository for archaeological data. It was not the intent of the EIR to fully evaluate the significance of all sites and their specifics, but to leave such evaluation to later review prior to development. Mitigation measures in the EIR are intended to ensure that such detailed review will take place.

Comment: Archaeological sites may have significance in addition to their academic value to archeologists and paleontologists, such as educational, cultural, spiritual or religious significance.

Response: The consideration of significance of archaeological sites should include attention to the above factors.

Comment: The Council should expand the Archaeological/Historical section prior to adoption of the final EIR.

Response: The level of evaluation in the EIR is considered appropriate at the General Plan level. The Plan and EIR include mitigation measures to apply at the project level.

Comment: A final cultural resource management plan should be drafted and implemented by a commission of citizens on behalf of all Californians concerned about such resources.

Response: The Council should consider creation of such a commission charged with responsibility for development of such a plan. Considering the significance of local sites to the region and the state, it may be appropriate to include individuals from outside the City or to work with an interjurisdictional or interagency group to develop such a plan.



4. County of Los Angeles Department of Health Services, September 6, 1984.

Comment: The Department of Health Services recommends that public sewers be used as the preferred method of sewage disposal wherever possible. The Department has no objection to use of private sewage systems provided that each system is approved by the Department and installed in conformance with provisions of the Los Angeles County Plumbing Code.

Response: Mitigation measures included in the General Plan and EIR require such approval.

Comment: The plan should include guidelines for interior noise levels as well as exterior levels.

Response: The Noise Element will be augmented to include an interior noise level for residential developments of 45 dB CNEL in habitable rooms, as included in State noise insulation regulations.

5. Topanga-Las Virgenes Resource Conservation District, September 18, 1984

(Most of the District's comments relate to the General Plan but will be addressed as comments on the EIR as well.)

Comment: The Land Use Element does not include a comparison of the existing number of units with proposed units.

Response: Existing dwelling units are tabulated in the Housing Element, page 4.9, based on the 1980 Census. A comparison table will be added to the final General Plan Land Use Element.

Comment: The density range for residential-rural (0.05-0.2/acre) is too large to provide adequate guidance.

Response: The range of 5-acre to 20-acre equivalent lot area is intended to be further governed by policies of the City's Hillside Development Regulations.

Comment: The district is disappointed in policies for hiking, bike and equestrian trails. "Where appropriate" is too vague.

Response: Major regional trail systems are specifically supported by the Circulation Element map, Figure 2.5. Equestrian areas may be proposed by developers.

Comment: The County has a trail system which should be incorporated in this document. Policies do not include provision for protection of existing trails or creation of new trails.

Response: The City supports the trail system outlined on the trail system map, which was developed based on an updating of County and National Recreation Area trails maps. The City looks to other agencies for cooperative development of trails.



- Comment: Community design element policies on page 3.13 are not protective enough of views to Ladyface. They should include additional policies relating to prohibition of building on ridgelines and on slopes greater than 25 percent.
- Response: Views to Ladyface are protected by land use patterns and by design guidelines related to Ladyface. It is recommended that specific implementing policies be developed for preservation of Ladyface through use of techniques such as those outlined in the General Plan.
- Comment: The plan should acknowledge the higher runoff rate which results from channelization.
- Response: The final EIR will be amended to emphasize this point.
- Comment: The General Plan omits mention of increased fire danger in building on ridge tops and other risk-prone exposures.
- Response: Special risk-prone exposures will be identified and policies for dealing with these problems with Fire Department cooperation will be outlined.
- Comment: No mention is made of materials and facilities which might retard the spread and/or intensity of fire.
- Response: These measures should be included in the building code and site development standards. Fire protection policies call for development of such standards.
- Comment: Policies on geologic hazards are inadequate. With overlay maps of slope, known hazards such as slope failures and soil erosion, policies can be formulated to prohibit development in high-risk areas.
- Response: The slope map (EIR Figure 3) and geologic hazards map (Seismic Element Figure 9.2) with supporting policies and the Hillside Development Guidelines provide significant protection from hazards. Hazards are required to be considered at the time of development and suitable mitigation measures adopted.
- Comment: The General Plan should distinguish between open space lands suitable for recreation and those suitable for open space preservation.
- Response: This determination is in general left to the discretion of the land manager. It is not the City's intent to develop or manage open space lands except for local parks. Other open space lands can best be managed for appropriate use by State, County or Federal park agencies.
- Comment: How is the 5-acre to 20-acre designation justified for SEAs?





Response: The preferred strategy for SEAs is no development through transfer of development rights (TDR) or acquisition by an appropriate management agency. If this is not feasible or practicable, development is proposed using a specific plan process including evaluation of the suitability of development in habitat areas based on more detailed study.

Comment: Why have an alternative to the TDR program which permits development of 50% of the SEA?

Response: The City cannot prohibit development of developable areas without compensating owners. The specific plan is to provide a plan for preserving habitat value, must be developed at low density and may not involve development of more than 50 percent of the area.

Comment: The paragraph on recreation uses of open space should be placed with public facilities or parks.

Response: Appropriate recreation use should be considered for all open space lands.

Comment: Implementation policy 7.4 makes no provision for protection of existing oaks.

Response: The policy requires preservation of existing oaks where possible. In some cases, development of a parcel may not be possible without removal of some oak trees.

Comment: The General Plan advocates the use of specific plans for SEAs but does not provide guidelines to formulate such documents.

Response: The requirements for specific plans are found in State law. The General Plan includes a number of policies providing additional guidance for the content of specific plans in areas with special characteristics including P7.3, P7.5, P7.8, P7.16, P7.17, P7.20, and others.

Comment: How have the implementation policies of the General Plan been provided for in the Hillside Management Ordinance?

Response: The City's Hillside Development Regulations limit residential density as a function of slope.

#### 6. Las Virgenes Municipal Water District, September 21, 1984

Comment: The Plan and EIR contain outdated information from the Malibu/Santa Monica Mountains Plan and EIR. The District had provided updates on this information to the City's consultant in a previous letter. Detailed comments are provided.

Response: The General Plan and EIR have been modified to reflect the detailed comments of the District. In particular, the following significant changes are made:



1. References to capacity limitations resulting from limits on use of reclaimed water are eliminated. Reclaimed water may be used for irrigation or for discharge into Malibu Creek up to the entire capacity of the Tapia plant.
2. References to water quality are clarified to indicate that effluent and septic tank failures affect surface and ground water quality, but do not affect drinking water.
3. References to the District's areas of responsibility in comparison to those of the City with regard to public facilities and services are clarified.
4. References to sources and costs of water are clarified.

7. L. Mark Raab, Ph.D., Archaeologist, September 27, 1984

Comment: The City may not be obtaining the best possible professional assistance in archaeological matters by informing universities about archaeological work in the City and inviting them to document the site.

Response: Additional mitigation measures have been added and the order of application changed to provide for preservation of sites in place. All discretionary approvals will require investigation by qualified archaeologists.

Comment: Mitigation measures reverse the desired priority of site preservation over excavation.

Response: Mitigation measures have been changed to make preservation in place of the desired mitigation measure.

Comment: The Medea Creek archaeological site mentioned in the plan (p. 133) no longer exists.

Response: The text of the EIR has been modified to eliminate the implication that more may be found at this site.

8. California Department of Transportation, District 7, October 4, 1984 transmitted by State Clearinghouse October 15, 1984

Comment: The EIR should include both short- and long-term traffic mitigations for frontage roads and intersections near the freeway.

Response: These mitigation measures are discussed in the General Plan in greater detail. The mitigation measure for improvements (Item 4, p. 93) has been expanded to reflect the General Plan policies. The City was not able to identify short-term improvements at these intersections. A "no right turn on red" control at the Kanan westbound offramp has been proposed to improve flow and safety for movements on and off Canwood at Kanan.

Comment: Future traffic impacts should be addressed, including



determination of interchange improvement alternatives in the study area.

Response: Interchange improvement alternatives were identified with the assistance of Caltrans. These alternatives are illustrated in the General Plan (Figure 2.2 and 2.3, pp. 2.10 and 2.11). The EIR has been modified to refer to these changes.

9. Diane Venable, 28447 Driver Avenue, October 16, 1984

Comment: The residents do not desire a "balanced community" as outlined in the General Plan or mitigation measures in the EIR.

Response: Emphasis on development of a balanced community has been reduced in the General Plan. The EIR mitigation measures are estimates of the effect of the proposed land use plan on development and employment.

Comment: References to equestrian aspects seem too little for a rural-oriented community.

Response: References to equestrian uses have been amplified in the General Plan.

Comment: Mitigation measures involving improvement of Driver and realignment should be clarified.

Response: Mitigation measure 2 on p. 93 has been reworded to clarify that Driver would remain a two-lane arterial within its current developed section, and that right-of-way acquisition would be minimized.

Comment: Alternatives should be modified to delete references to extension of Thousand Oaks Boulevard to Las Virgenes Canyon Road, in Alternative 2, and make Driver a two-lane arterial in Alternative 3.

Response: The alternatives as described in the EIR were used for comparative analysis. Alternative descriptions illustrate the actual alternatives that were compared. Alternatives 2 and 3 were not recommended.

Comment: (p. 139) If Oak Park is to add 5310 additional homes, they must provide additional access to Lindero Canyon immediately.

Response: An additional circulation mitigation measure has been added related to circulation objective 2.4 calling for cooperative efforts with other jurisdictions.

Comment: Change references to Chesebro Road to Palo Comado.

Response: These references have been changed.





10. County Sanitation Districts of Los Angeles County, October 17, 1984

Comment: Two numbers for the size of the Calabasas Landfill are used in the DEIR and the General Plan. These should be clarified as follows:

260 acres are currently used for landfill operations, and 416 acres is the total area of the site except for 89 acres acquired by the Districts for constructing a new alignment of the landfill access road.

Response: The EIR and General Plan have been modified to reflect this clarification.

Comment: The Districts are not operating pilot waste-to-energy conversion systems at any landfills. Several such systems are in various stages of planning. The Districts operate landfill gas recovery systems at all landfills, with energy recovery components at Puente Hills and Palos Verdes.

Response: The EIR and General Plan have been modified to reflect this clarification.

Comment: In approximately five years the current fill area will reach capacity. The current unused capacity of the site is 15.9 million tons for approximately 27 years. The Districts plan to move landfill operations to an adjacent canyon, providing an additional 22 years of capacity.

Response: The General Plan and EIR have been modified to reflect this clarification.

11. Community Association of Saratoga Hills, October 19, 1984

Comment: The EIR does not address many of the severe environmental effects of the City's development plans. These include noise, air pollution, traffic and circulation and schools.

Response: The DEIR deals with each of the issues mentioned by the Association in some detail. Noise is discussed on pps 67-68, air quality on pp. 22-32, traffic on pp. 86-93 and schools on pp. 103-104.

Comment: Traffic using the projected arterial highway is not estimated.

Response: The arterial discussed, Driver Avenue extension, is estimated to serve fewer than 10,000 vehicles per day to Lost Hills Road. Lost Hills Road would be expected to serve fewer than 10,000 vehicles per day north of the Ventura Freeway. Traffic generated at the Lost Hills interchange due to industrial, commercial and residential development of the Curry-Raich property south of the freeway would be significantly greater.





The Driver extension would be intended to serve only local traffic except in emergencies when the Ventura Freeway was unavailable.

Additional environmental studies regarding land use, traffic, roadway alignment, etc. would be required prior to development of the area between Saratoga Hills and Agoura Hills.

Comment: The Lost Hills statistical area cannot support the doubling of the number of units proposed in the General Plan because of lack of available land and 2000-foot clearance required from the sanitary landfill.

Response: Development of the area around Saratoga Hills would require detailed design studies to determine appropriate building sites. The proposed use in the General Plan is based on the county Malibu-Santa Monica Mountains Plan modified by slope analysis.

Comment: School projections (Table 22, p. 104) are impractical and not coordinated with the school district.

Response: The information in Table 104 was provided by the Las Virgenes Unified School District.

## 12. Pat Uebersax and Dr. Mark Raab, April 29, 1985

Comment: Executive summary, p. iii, has been revised to reflect the importance of preservation of resources, but neglected need to identify resources. Specific text changes are recommended.

Response: The executive summary has been modified to include identification of resources and alternative mitigation measures.

Comment: p. 134. The history of the Reyes Adobe should be researched thoroughly. The site of the Miguel Ortega adobe at this location is in question. The indicated construction date of 1820 should be omitted if it cannot be reasonably well documented.

Response: Information in this section was provided by the Las Virgenes Historical Society. References have been eliminated or modified to indicate uncertainty.

Comment: The Las Virgenes Historical Society is attempting to have the adobe placed on the National Register of Historic Places but may not be able to because of modification to the structure's architectural integrity over the years.

Response: The reference to National Register status has been modified.

Comment: The reference to Juakin Murietta in connection with the Adobe reflects an embarrassingly unprofessional approach to the historiography of the City. There are other, better reasons for believing that the adobe has historical value: it represents architecture of a period in the state's and community's history, it is a focal point for artifacts that are a link to past ways of



life, it is a point of reference culturally for citizens of Hispanic and Mexican heritage, . . .

Response: The discussion has been modified to change emphasis as recommended.

Comment: p. 135. This section should be more positive in tone, emphasizing the value to the community. Specific text changes are recommended.

Response: The Final EIR has been modified to include the recommended changes.

Comment: p. 135-136. Specific recommendations are made for strengthening mitigation measures for archaeological sites including site surveys, information and review, and site protection.

Response: The Final EIR and General Plan have been modified to include the recommended language.

Comment: p. 138. Unavoidable adverse impacts should be modified to account for the changes made on p. 135.

Response: This section is modified in the Final EIR.

Comment: p. 142. Mitigation measures summary should be modified to account for the changes made on page 135.

Response: This section is modified in the Final EIR.

13. Mary E. Weisbrock, 6262 Timberlane, April 30, 1985.

Comment: p. 125. Add at end of first paragraph, "with pastoral vistas of scenic rolling hills.

Response: This addition is made in the final EIR.

Comment: p. 125. Aesthetics environmental impact section should be modified to include the following:

"Development needs to be controlled to protect the scenic vistas which make Agoura Hills unique. Control measures must include maximum setbacks of buildings, positioning of buildings not to block views, minimal grading and preserving a maximum number of oaks in their natural state (along our scenic highways).

Response: Environmental impact section has been augmented to make impact discussion more specific in the areas mentioned by Ms. Weisbrock. Mitigation measures discussion has been augmented where mitigation measures mentioned are included in the General Plan.

Comment: p. 125, 126. Mitigation measures for aesthetic impacts should include the following specific mitigation measures.



- (1) Accurate grading plans before project approval
- (2) Minimal grading, working with the natural terrain
- (3) Comparison of building heights and relationship with ground level and involved scenic views.
- (4) Preserve maximum number of oaks; parking lots built around the healthy oaks.
- (5) Eliminate all large cut and fill slopes
- (6) Omit the word primary (secondary ridgelines are all just as important).

Add the following mitigation measures:

- (9) Preserve and enhance scenic views of the city's mountain backdrop and natural landforms in their present state to the greatest extent possible.
- (10) The high visibility of most of the City's hillsides and ridgelines for the residents and thousands of freeway travelers and commuters. Particular attention should be given to development plans before project approval within these areas to preserve their scenic qualities.

Response: This section has been modified to reflect the comments of Ms. Weisbrock where these mitigation measures are included in the General Plan or other development controls. In some cases, the specific limitations suggested by Ms. Weisbrock are not incorporated in order to maintain City flexibility in review of future development plans. At the General Plan level, guidelines are recommended for use in reviewing future projects rather than incorporating specific limitations in most cases.

Ms. Weisbrock's recommendation regarding elimination of large cut and fill slopes is not included in the General Plan. Specific limitations on grading are left to discretion of the Planning Commission and City Council at the project level. Guidelines for minimization of grading are appropriate in the general plan.

Comment: p. 146, 147. Eliminate the whole concept and eliminate charts on page 146 and 147.

Response: The California Environmental Quality Act requires the consideration of alternatives by decisionmaking bodies prior to approval of projects with significant impact on the environment.

The alternatives discussed on these tables were considered during the development of the General Plan, and are reflective of the range of alternatives available to the City Council in making a decision.





Comment: The concept of a balanced community is foreign to Agoura Hills and should be eliminated from the General Plan and EIR.

Response: The ratio of labor force to employment is an item of information about the alternatives discussed in the text. The labor force/employment balance may or may not be a policy matter of importance to the City. References to labor force balance have been largely eliminated from the General Plan.

The purpose of the EIR is to present information about the General Plan. The employment/labor force balance ratio is an important aspect of the Plan's environmental impact. An employment/labor force balance close to 1, as reflected in the land use plan proposed, can help to minimize regional impacts of the plan on the transportation system. By minimizing transportation system impacts, this balance can help reduce the impacts of travel, such as requirements for large areas of land and capital investment for circulation system construction, and air quality and noise impacts of transportation system operation.



PUBLIC HEARING COMMENTS

Comments at Planning Commission Public Hearing, September 25, 1984

14. John Perry, 6045 Fairview

Comment: Open space designation on the General Plan may deny property rights of some land owners. The transfer of development rights system may not give a fair return on current values.

Response: The transfer of development rights program will have to be defined in a way that does not result in significant losses to current owners or owners would have a potential cause of action in inverse condemnation. The transfer of development rights program would have to include recognition of vested rights of current owners and reasonable development expectations based on prior planning (the Malibu-Santa Monica Mountains Plan) and zoning.

15. Ronald J. Kapla, 4025 Defender Drive, representing Liberty Canyon Homeowners Association

Comment: The slope stability classifications west of Liberty Canyon should indicate unstable slopes based on recent attempts of developers to develop these areas which have been stopped because of slope stability.

Response: The slope stability map (EIR Figure 4, p. 18) shows areas immediately west of Liberty Canyon as having moderately low and low stability. One landslide area is included in a "very low" stability category. The geotechnical constraints map (General Plan Figure 9.2, p. 9.8) shows a known landslide and a suspected/possible landslide area west of Liberty Canyon. These maps illustrate the areas of slope instability discussed by Mr. Kapla.

16. Patricia Uebersax, 30509 Sand Trap Drive  
(See also written comment September 25, 1984)

Comment: The EIR presents a limited view of the value of archaeological sites. Other values include value to residents and value to Native Americans.

Response: The Final EIR will expand the consideration of value to include these and other factors. (See response to letter of Clay A. Singer.)

Comment: Delay in excavating archaeological sites will result in more information being gained from the excavation with advanced techniques.

Response: The EIR has been modified to make preservation of sites in place the most desirable mitigation measure for impact on archaeological sites.



Comment: Reports on archaeological investigations should be made available to all. The local library should have copies of reports.

Response: Although many archaeological reports include information that if made public would endanger sites, it may be appropriate to request that reports of excavations in the local area be provided to local libraries.

17. Don Wiechec, 3029 Liberty Canyon, Agoura Hills

Comment: The EIR does not recognize value of archaeological sites beyond their academic utility. A local committee should be established including Native Americans and academic interests to review archaeological impacts of projects.

Response: The EIR has been amended to recognize additional value of archaeological sites. The City should consider establishment of a committee to develop recommendations for archaeological mitigation measures and comment on reports.

Comment: The EIR does not include the flooding area along Agoura Road near Liberty Canyon. Flooding in this area in the winters of 1981 and 1982 resulted in the closure of Agoura Road for weeks at a time.

Response: This is a relatively minor localized flooding problem in a small watershed which is expected to be reduced at the time the area of flooding is developed or Agoura Road is improved. The area did not appear on Federal Flood Insurance Rate Maps because of its small size.

Comment: Apartments are inappropriate adjacent to Liberty Canyon. No recreation facilities are nearby requiring riding or walking along Agoura Road to reach parks. Increasing density will add to this problem.

Response: Medium density residential use (6-10 units/acre) is proposed along Agoura Road west of Liberty Canyon because this area meets a number of criteria for multiple family development. The area has excellent freeway and arterial access and is separated by topography from nearby single family homes. The General Plan proposes a park site on the south side of the freeway to increase recreational opportunities in this area.

18. Charlie Cook, Newberry Park, CA, representing Chumash in Los Angeles and Ventura Counties

Comment: The EIR should provide better mitigation measures and recognize additional values of archaeological sites.

Response: The Final EIR expands the definition of value of archaeological sites and modifies mitigation measures to better protect sites.

Comment: There are a number of unrecorded sites that need to be protected.





Response: These sites need to be documented and recorded at the regional archaeological records center.

Comment: What was the source of information on the existing sites?

Response: Information on existing sites was obtained through an archaeological records check at UCLA.

19. Robert Richards, representing 32 property owners of approximately 16.1 acres near the intersection of Cornell Road and Agoura Road

Comment: Part of the area in this ownership is designated open space on the plan. This designation could result in significant economic loss to owners.

Response: The open space designation is based on a concept of transfer of development rights which would retain the value of land to current owners.

20. Chester King

Comment: The EIR understates the value of archaeological sites and does not call for preservation of sites. One third to one half of the sites in the Santa Monica Mountains area have been leveled for development. Each site represents a place where a unique group of people did unique things and is the only documentation of Chumash history.

Response: The Final EIR has expanded the definition of value of archaeological sites and modified mitigation measures to increase emphasis on preservation of sites in place.

Comment: The EIR and General Plan could provide stronger mitigation measures for sites which are excavated. Santa Barbara County requires that as much information as possible be obtained from the site.

Response: Plan and EIR mitigation measures have been strengthened in accordance with this and other comments.

City Council Public Hearing, February 20, 1985

21. Pat Uebersax, 30509 Sand Trap Drive, Agoura Hills (comments reflected in written comments dated April 29, 1985, and responded to in response to written comments).

City Council Public Hearing, April 17, 1985

22. Mary Weisbrock

Comment: p. 125. Include the potential for development to obstruct views as an aesthetic impact.





Response: This section has been modified to include this potential impact.

Comment: p. 126. Mitigation measures should include preservation of views and maintenance of key landforms.

Response: This section has been modified to include additional mitigation measures included in the General Plan.



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